

ADULT PLAY IN A CHILDREN'S MUSEUM

By

KRISTI L. DICKEY

Bachelor of Science in Elementary Education/
Special Education Option
Oklahoma State University
Stillwater, Oklahoma
1989

Master of Science in Curriculum and Instruction
Oklahoma State University
Stillwater, Oklahoma
1995

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Dissertation Approved:

Dr. Kathryn Castle

Dissertation Adviser

Dr. Pamela U. Brown

Dr. Jennifer Job

Dr. Ed Harris

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Abstract:

As play declines in homes and schools, children's museums are safe, family-friendly environments that offer hands-on, exploratory, inquiry-based play activities for children and their caregivers. Children's museum practitioners often have expectations that visiting adults will participate in play activities with their children, which frequently differs from the parent or caregiver agenda. The purpose of this study is to explore and describe the adult play experience in a children's museum: the nuances of adults' views of the meaning of play, their perceptions of the adult role in children's play, and their behaviors while in the museum.

Using hermeneutic phenomenology as the methodological approach, this study examines and describes the experiences of 17 adults in a children's museum: two full-time staff members, three part-time staff members, three volunteers, and nine visitors. The findings are consistent with the theory that each adult's museum experience is individual and unique based on his or her background experiences, beliefs, and motivations for being at the museum. The results of this study indicate that staff members and volunteers often have differing agendas from visiting adults; however, parents and caregivers exhibit a wide range of acceptable roles while at the children's museum—which may or may not match the expectations of museum practitioners. Findings also illuminate the ways in which a small children's museum meets the needs of both children and adults in the surrounding communities.

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CHAPTER I

INTRODUCTION

Some people ask about play as if it were a relief from serious learning or even worse: a waste of time. But for children, play is exceedingly serious...and important! In fact, play is a way for children to learn who they are, how the world works, solve problems and to express feelings. Yes, play is the real work of childhood, and for young people today, many children's museums offer play experiences that other settings are not able to give them.

—Fred Rogers

A mother and daughter linger in the old-fashioned grocery store exhibit at the local children's museum. The four-year-old squeals, "Mommy! You're the customer!" Mom, with baby on her hip, appeases her daughter's requests by filling the shopping basket with plastic fruits and vegetables. She takes them to the counter where her daughter pokes at the keys of the antique cash register. Once the transaction is complete, the little one chatters and helps her mom put the groceries back on the shelves and the scenario begins again. Across the museum in an exhibit filled with giant foam blocks, a grandmother helps her grandson build a house to protect them from the big bad wolf who is coming to eat them. Attempting to build a roof, they compare the sizes of blocks to the distance between the walls of their house. Discovering that no blocks are long enough, they adjust the walls to accommodate the block sizes. They complete the house just in time. Once they both crawl inside, grandmother and grandson call out to the wolf, "Not by the hair of my chinny chin chin!" Next to the giant blocks is an exhibit with smaller wooden blocks. A mother hangs back as her pre-school aged son builds a structure. She watches him intently, but keeps her distance. Occasionally he runs to her and asks her to play with him. She declines his

request to play, but affirms his efforts and encourages him to continue. Nearby in the theater area, a staff member sings and engages in role play with a group of children on the stage.

According to the Association of Children's Museums (ACM), there are close to 400 museums across 23 countries in the world, which may serve 31 million children and families annually (ACM, n. d.; ACM, 2017). Inside these informal learning spaces you will see a variety of interactive and collaborative exhibits designed for all ages and experience levels. The common thread connecting most children's museums is their mission to preserve and respect childhood while providing a safe environment for children and their families to learn through play. Many children's museums claim to serve as educative resources that help families learn to "balance cultural influences that compress childhood" while providing programs and exhibits that "empower children to set their own pace" (ACM, 2005a, p. 1). The ACM's stance is that today's children face many obstacles in their communities, schools, and families that threaten healthy development. Harried lifestyles, limited time and safe spaces, and academic pressures place so many demands on children and their families that for many, play has become a luxury rather than an integral part of everyday life.

Many families turn to children's museums to increase the amount of time their children spend in fun, enriching play experiences (Caswell & Warman, 2014). For some families, a visit to a children's museum is an opportunity for the children to have fun with friends, siblings, and parents or other adult caregivers. Most children's museums highlight the importance of adult play with children, regarding the family group as the most critical influence in early learning and instrumental in development of the skills and confidence needed for children's future learning (Beckstrom, Belmont-Skinner, Bond, Farrington, Medrano, Meisels, Pohlman, Roberts, & Stott, 2005). If you enter any children's museum, ideally you will see families playing and learning together; however, you may witness adults who exhibit behavior that experts in children's museum studies would consider less than ideal. Adult behaviors may range from appearing unengaged or passive in the play process to being excessively directive or supervisory, sometimes

even hovering over children as they play. The general expectation communicated by children's museums through their websites and other promotional materials is that adults who bring children are welcomed in these spaces as players. Many museums also encourage staff members to play, and place emphasis on training their employees to engage in play with families when appropriate. Staff members are sometimes encouraged to model play behaviors for adult visitors by engaging whole families with role-play activities, props, or other exhibit elements (Porter & Cohen, 2012).

Much emphasis is placed on the participation of parents and other adult caregivers at children's museums, yet how much do we know about the play experiences of adults? How do the adults who visit or work in children's museums experience play within the informal learning spaces? How do adults experience play, period? I begin with my own understandings of play, because these experiences are immediately accessible to me. I think of my adult life and wonder about my lived experience of play. It has been a long time since I have felt truly playful, but I remember it clearly from childhood. Phenomenologist Max van Manen (1997) writes "a lived experience has a certain essence, a 'quality' that we recognize in retrospect" (p. 36). Through reflection, phenomenological research can help us to uncover this essence, this "whatness" of the illusive phenomena in question (van Manen, 1997, p. xiv).

According to van Manen (1997), researchers should begin by engaging in personal lived-experience descriptions before this task is asked of others. To begin the process of phenomenological research regarding the *whatness* of play, it feels necessary for me to reflect on my own lived experiences as a player; therefore, I will begin by remembering and describing my earliest memories of play. With hardly any effort, the sights, sounds, and smells come flooding back to me.

Memories of Childhood Play

Hay Barn

The sweet smell of freshly-baled alfalfa hay permeated the air. Every time I visited the barn there was a new configuration of hay bales that posed an interesting climbing structure. This year's crop had been big; the bales were stacked high, almost

to the rafters. But no stack of bales was too high for me. I knew I could make my way to the top if I could just figure out which path to take. With no clear plan, I started up. Finding the way became less difficult as I climbed. I looked for the edges of the bales that jutted out, and rested my tiny sneakers on the ledges they created. I stuck my little hands into the scratchy holes in between the bales, sometimes grasping the wires that bound the bales together. By ledge and by gap, I made my way to the top. My heart pounded as I rested. I was slightly afraid of heights, but enjoyed the thrill it gave me to be sitting on top of the massive stack looking down at where I had begun my climb. Would my mother be angry to find me up here? She would likely never find out. I had never seen my mother in the barn. My dad and brothers were always the ones who hauled the hay and stacked it in the barn. They had seen me climb, and even encouraged it by creating interesting patterns and fort-like structures in the hay for me. But I had never climbed a stack this high before. It seemed wrong; maybe I had taken a risk I shouldn't have, especially being alone in the barn. But I had made it, and as I sat there on top of the mile-high stack of bales I became less afraid of how high I was. Throughout the next few days, I practiced climbing up and down the stack of bales until I could do it with no fear. And it was at the top of that very haystack during one of those hot summer afternoons where I planned my next challenge—jumping off.

Raising the Pipe

I hammered the nails into the splintered wood, comparing the measurements between the nails on both poles until they appeared evenly spaced. Comparing and hammering, hammering and comparing. Once I had placed the nails, digging holes deeply enough to secure the poles into the ground proved to be difficult. The ground was very hard and dry. I managed to stabilize the poles enough so that they stood freely, about four feet from each other. I rested a piece of plastic pipe on the bottom nails of each pole. The nails looked as if they would hold the weight of the pipe. I backed up in the yard a few feet, took a running start and leaped over the pipe. Yes! It worked. I raised the pipe to the next level of nails and tried again. I cleared that height easily. I continued raising the pipe until I found the height that challenged me. This is where I would concentrate my efforts. High-jump was not my best event. If I wanted to do well at the end-of-year track meet, I would need lots of practice.

Mud Pies

I bent over the irrigation pipe that stretched across the meager grass. I put my pint-sized milk carton next to one of spurting streams of water and aimed it into the cardboard opening. When it was full, I carried the carton over to the green plastic bowl filled with dirt and poured it in. I stirred with the kitchen spoon I had bent from digging into the hard ground. I needed more water; it was still too dry. After a few more trips to the spurting water hole, the dirt and water combination was the right consistency. I used the scoop my mother had given me to pour out roundish blobs of mud onto the splintery picnic bench. I reached my bluish-green stained fingertips into the baggie of dyed homemade rice sprinkles and pinched a few for decorating the tops of the muddy mounds. Perfect. Now all I needed was for the sun to do its part and my pies would be baked. My mother and sisters would be proud.

Wheat Harvest and Sandwich Bags

Laughing and squealing, we ran through the freshly harvested wheat stubble and chased the empty sandwich bags as the wind carried them through the air. Out of breath, we caught up with the bags as they finally reached the ground. We gathered up each of the bags. We weren't ready for the fun to end. We tossed the bags up into the wind's reach again and squealed with delight as the bags swirled in the air and drifted farther down the field. Looking back from where we had come, we could barely see the adults gathered around the trunk of the car cleaning up the remains of the evening sandwich meal. We continued throwing and chasing the bags, again and again, until the call from the grown-ups ended the fun. The low sun in the horizon signaled that it was time to go home.

By reflecting on our own play experiences might we become more thoughtful in our current play experiences with children? Pedagogy is defined by van Manen (1997) as the “activity of teaching, parenting, educating, or generally living with children, that requires constant practical acting in concrete situations and relations” (p. 2). Pedagogical thoughtfulness requires a “sensitivity to lived experience” and a “hermeneutic ability to make interpretive sense of the phenomena in the lifeworld in order to see the pedagogic significance of situations and relations of living with children” (van Manen, 1997, p. 2). By exploring the *whatness* of our own lifeworlds—the lived experiences that make us who we are—is it possible that we can become more informed and tactful in our pedagogical relationships with children?

Thoughts Regarding My Own Play Memories

My written play scenarios are my attempt to describe my own lifeworld of childhood play; however, as much as I reflect and revise, my words still seem to miss the mark in describing exactly what I felt in those moments. Some would say “ultimately words miss the fullness and the uniqueness of our private worlds” (van Manen, 1997, p. xiii). Because of language's essential social nature, words may fail to be adequate. Yet, it is possible that through language, we “discover our inner experiences, just as we can say that through experiences we discover the words to which they seem to belong” (van Manen, 1997, p. xiii-xiv). Hermeneutic

phenomenology helps us uncover the meaning of these experiences. If I were asked to describe why these particular play experiences stand out to me, I would tell you that the freedom and autonomy I felt during play as a child taught me much about myself and my capacities as an individual. I spent many of my childhood days outdoors, climbing large stacks of alfalfa hay or riding bareback on my family's horse. I do not recall the presence of adults as I roamed the countryside picking wild plums at the creek or hunting for horned toads. I made mud pies to my heart's content, sometimes while wearing white pants—*did my mother really let me do that?* These images, fleeting yet intense, are etched in my memory as significant to my being. As I played, I learned joyful persistence. I tried things and failed—*just ask me about jumping off the haystack*—then adjusted and tried again. It was through this process that I learned about my own limits and capabilities. The International Play Association writes about the importance of play in developing autonomy. "Playing is a child's free, open, boundless, and self-controlled activity; through play children discover the differences between themselves, others, and the world in which they live. These discoveries help them become individuals and independent, self-sufficient and autonomous" (IPA, 2014, p. 2). I constructed my sense of self on our farm as I climbed, roamed, and created. I learned and became; my identity became evident through my childhood play.

Why Study Play in a Children's Museum?

The desire to play is innate; within each of us is the primal longing to create, imagine, and express ourselves in the purest form. The International Play Association declares that "play is a means of learning to live, not a mere passing of time" (IPA, n. d., p. 1). Early philosophers and scholars attest that play has been essential to the healthy development of children of all cultures throughout history (Frost, 2010; Frost, Wortham, & Reifel, 2012). I was privileged as a young child to have been raised in an environment that afforded me wide-open play spaces, and a family who gave me large blocks of time to explore them. Not all children are as fortunate.

Throughout history, many children have struggled to play. Crises such as poverty, natural disasters, child-labor, war, and disease have historically diminished children's opportunities for play (Frost, 2010). Alarmed by the living conditions of impoverished children in overcrowded cities, child-advocates of the time made it their priority to improve children's overall health and well-being. Referring to children of their time as "victims of a stolen childhood," these early reformers in this progressive era "awakened the conscience of Americans" in what some call a "child-saving movement" intended to rescue children from the devastating effects of poverty and homelessness (Frost, 2010, p. 63). One result of the efforts of this early child-saving movement was the focus on improving conditions for organized play and learning (Chudacoff, 2007; Frost, 2010). Through changing beliefs about childhood along with productive discourse followed by action, play was incorporated into the school curriculum in a child-centered approach (Dewey, 1902; Frost, 2010). In progressive schools, play was valued as a fundamental aspect of learning. Children's interests served as a primary motivation for their work, and there was greater emphasis on utilizing nature through gardening and other outdoor play activities (Dewey, 1902; Frost, 2010). Child-centered school curriculum was one result of the child-saving movement. During the 1890s and continuing through the First World War, the Progressive Era of Education emerged in the United States, in part due to concern for children (Chudacoff, 2007; Frost, 2010). Advocates constructed playgrounds, community centers, and other types of recreation facilities for children and their entire families, with the focus on providing opportunities for quality play and learning through discovery (Frost, 2010). The first children's museums were born from this effort to preserve the integrity of childhood.

Today's children are again struggling for play, although due to a new set of circumstances (Gray, 2011; Frost, 2010). Current evidence suggests that academic pressures, the lack of child-centered focus in schools, and stressed, overprotective, and overworked family lifestyles all threaten the time spent in healthy play that is essential for children to thrive (Ginsburg, 2007; Gray, 2011). Children's museums offer playful environments where, as in the

Progressive Era of education, the interests of children are the driving motivator to learn. These opportunities for children to spend quality time with caring adults to learn concepts through rich, playful experiences provide necessary respite from narrowed curriculum and standardization, which is evident in so many of today's schools (Beckstrom et al., 2005). "Grounded in well-established pedagogy, children's museums are leading a movement that combines specific learning objectives with play in informal learning environments" (ACM, 2005a, p. 3). Children's museums also serve as models from which caring adults can learn. Participating in interactive exhibits or playful events with knowledgeable museum staff can introduce visiting adults to new activities or ways of being with children outside of the museum. In the standards developed by Chicago Children's Museum (CCM), learning is to be "visible within play" for all to recognize, not only to assure parents that children learn through play, but also to provide meta-cognitive opportunities so that more effective learning can be applied in other contexts (Beckstrom et al., 2005, p. 9). In this way, the museum's mission of learning through play may extend beyond its walls into the homes of the families who visit.

Children rely on adults to give them what they need to flourish, and history has shown that actions by caring adults can make a difference in their lives. "The early child-saving movement serves as a historical model of caring, aroused adults rising to the aid of distressed children and building a period of innovation that permanently changed the lives of children" (Frost, 2010, p. 83). It is time again for adults to rescue children "from a perfect storm of events...which are rapidly resulting in the diminution of their play and play environments and threatening their health, development, and welfare" (Frost, 2010, p. 83). Adults who visit and work in children's museums care about children. To question the experience of those adults—their way of playing and being with children—is an act of pedagogical tact, or thoughtfulness regarding the interactions between adults and the children in their care (van Manen, 1997).

To do phenomenological research is to question the way we live in the world. To seek to understand the world and thus be intentional about our interactions in the world is its goal (van

Manen, 1997). To question the world's "secrets and intimacies" makes research "a caring act: we want to know that which is most essential to being" (van Manen, 1997, p. 5). Researching the adult experience in a children's museum—the experiences of visiting adults and those who plan or facilitate those experiences—may reveal mysteries that enable us to be more intentional about our ways with children.

The Complexity of Adults' Roles in Children's Play

Adults enact a variety of roles in children's play, from being uninvolved or passive to fully participatory (Beaumont, 2010; Johnson, Christi, & Wardle, 2005; Swartz & Crowley, 2004). However, there are conflicting views of the importance of adult participation in children's play activities. Some scholars and practitioners suggest that adults' involvement in children's free play can be an interruption (Farne, 2005; Ginsburg, 2007). Even well-intentioned adults are sometimes seen as intrusive, possibly changing the way children perceive their own play (Farne, 2005; Sutton-Smith, 1997). Others advocate for adults to participate in play with children, suggesting that adults "assume a critical role in engaging children in play and supporting and scaffolding play as it develops" (Bodrova, Germeroth, Leong, 2013, p. 118). One may infer from the literature that a delicate balance exists between adult interruption of children's play and providing a just-right amount of adult support. For example, Ginsburg (2007) posits, "Ideally, much of play involves adults, but when play is controlled by adults, children acquiesce to adult rules and concerns and lose some of the benefits play offers them, particularly in developing creativity, leadership, and group skills" (p. 183).

Nostalgic memories of play, much like my own, often reveal a feeling of liberation from adults. What does this mean for families who visit children's museums in search of similar play experiences for their children? In a children's museum whose mission is *learning through play*, navigating this balance is challenging at best. Adult caregivers may sometimes be uncertain about how to best support the children they bring, and even the most well-informed museum staff or volunteer may question his or her interactions with children: *Should I play with the kids or leave*

them alone? Should I show them how this works or ask a thoughtful question instead? Some museums provide professional development for their staff members and volunteers to help prepare them for the complex issues regarding adults' participation in children's play; however, achieving consistency of professional preparedness across institutions is challenging (Porter & Cohen, 2012; ACM, 2012).

Problem Statement

Children's museum practitioners—professionals who design exhibits and implement children's museum programming—promote participation of visitors of all ages. The interactive exhibits and programs they implement are often intended to encourage child-directed free play while also providing opportunities for learning through play (ACM, 2005a; Downey, Krantz, & Skidmore, 2010; Riedinger, 2012). Most practitioners consider the participation of adults a crucial element of the children's museum experience. While acknowledging the complexity of adult roles and valuing all adult contributions to children's play, most children's museums place the highest level of importance on child-directed play experiences that are actively supported and facilitated by adults (Downey et al., 2010; Puchner, Rapoport, & Gaskins, 2001; Riedinger, 2012; Shine & Acosta, 2000). Research indicates that the presence of an adult who is actively involved in supporting the play experience increases the opportunity for quality play and higher levels of learning (Downey et al., 2010; Leong & Bodrova, 2012; Puchner et al., 2001; Shine & Acosta, 2000). Museum practitioners encourage visiting adults to be active participants, not only so the learning through play experience will be more impactful for children, but also in hopes that they will develop a knowledge and appreciation for the benefits of play so that playful learning experiences will be valued and continued outside of the museum walls.

A discrepancy sometimes exists between the expectations of museum practitioners and the perceived lack of participatory behavior demonstrated by visiting adults in the museum (Downey et al., 2010; Shine & Acosta, 2000; Wood & Wolf, 2010). Despite the evidence that adult participation in child-led play enriches the learning through play experiences in children's

museums, many adult visitors exhibit hands-off behaviors or are overly directive or disciplinary (Downey et al., 2010; Shine & Acosta, 2000). Some research indicates that visiting adults and museum practitioners may have differing views of participatory behaviors. In a study of timed and tracked observations of 168 children ages three to ten years, fewer than ten percent of adults studied were observed playing with children, although many of the same adults reported being engaged in play (Downey et al., 2010).

Barriers to more engaged adult involvement in a children's museum may be a lack of understanding of the benefits of play, or a lack of confidence and/or knowledge of how to play with children (ACM, 2005a; Downey et al., 2010; Fisher, Hirsh-Pasek, Golinkoff, & Gryfe, 2008). Literature in the field also indicates that exhibit design may sometimes prevent, rather than encourage, sustained adult involvement (Downey et al., 2010; Gaskins, 2008).

In a children's museum setting, visiting adults, museum staff, and volunteers make decisions about whether or not to insert themselves in children's play. Prior experiences and views of the meaning of play may influence decisions about whether or not to engage with children in museum activities. Exploring the *whatness* of the adult play experience—both visiting adults and those who design exhibits, programs, or interact with children—may provide insight into the behaviors of adults who visit or work in informal learning spaces. This new insight may enable the professional children's museum community to better support all adults in informal learning institutions who are involved in this modern-day child-saving effort, which in turn may result in more adults who practice pedagogically sound ways of interacting with the children in their lives.

Research Purpose

The purpose of this study was to explore and describe the *whatness* of the adult play experience in a children's museum: the nuances of adults' views of the meaning of play, their perceptions of the adult role in children's play, and their behaviors while in the museum.

Children's museum staff members, volunteers, and visiting adults were participants in the study.

Research Questions

My questions for this study are as follows:

1. How do adults experience play in a children's museum?
(Data sets: interview/observations)
2. What is the meaning of play to adults who interact with children at a children's museum? (Data sets: interview/protocol writing)
3. How are adults' views of the meaning of play reflected in their behavior at the children's museum? (Data set: observation)
4. How do adults view their own role in children's play? (Data set: interview)

Significance of Study

This phenomenological research serves as one more caring act in a much needed child-saving movement of today. Some view the learning through play mission of children's museums as compensatory for the lack of play and joyful learning experiences in today's schools (Caswell & Warman, 2014). Possessing a deeper understanding of the adult's play experience in the children's museum may have a lasting impact on those whom their mission serves. According to van Manen (1997), "action sensitive knowledge leads to pedagogic competence" (p. 156). This study has uncovered the pedagogically thoughtful interactions that occur between adults and children within a children's museum, as well as among those who work or volunteer at the children's museum and the community members it serves.

To Theory

This research provides a unique theoretical perspective to both the fields of museum studies and early childhood by contributing a lens through which to view the adult's perspective of a children's museum experience. Results of this study could potentially lead to a similar application of theory in other settings where adults and children interact.

To Research

Research regarding children's museums has grown over the last decade, both in museum studies and the field of early childhood. A body of research exists regarding the value of children's museums in children's learning and the interactions that occur between adults and children who visit those museums. This study will contribute to this field of research by adding the perspective of the adults who work, volunteer, bring children, or play at the museum.

To Practice

This research contributes thoughtful applications to anyone who has pedagogical interactions with children—museum practitioners, educators, and caregivers—and ultimately serves children in its effort.

For museum practitioners. This research contributes in part to the body of knowledge to which children's museum practitioners turn when designing or assessing museum programming or exhibits. Children's museum practitioners set a tone for pedagogical tact—the ways in which adults interact thoughtfully with the children in their care. Children's museums seek to reach all children and their families, regardless of ability, race, background, or social status. While hermeneutic phenomenology is descriptive and interpretive, it is also a critical methodology and encourages reflection and action (van Manen, 1997). While it may not serve a political agenda, its thoughtfulness may lead to political or personal action benefitting those in the community it serves (van Manen, 1997).

For caregivers. Adults play a critical role in how the museum is experienced by the child. Children's museum practitioners place some of the responsibility of the child's experience on the parents or other adult caregivers who make decisions about whether or not, and how to play with children. This research has potential to help adults reflect upon the lasting implications of their interactions with children, not only inside the museum walls, but beyond their visit. According to van Manen, this reflection is necessary in order for adults to be sensitive to their ways with children.

We need to act in the lives we live, side by side with our children, but then also wonder, always wonder whether we did it right. We need to ‘listen’ to pedagogy so as to be able to act in a better way pedagogically tomorrow. (van Manen, 1997, p. 149)

For educators. For educators, this research may serve as a reminder to be thoughtful in their ways with children. The toughened academic standards in today’s schools place such burdens on teachers that they may have little time to devote to such reflection. While this research focuses on the adult experience, it encourages a reflectiveness of the adult relationship with children. “The end of human science research for educators is a critical pedagogic competence: knowing how to act tactfully in pedagogic situations on the basis of a carefully edified thoughtfulness” (van Manen, 1997, p. 8). To be an educator is to make a commitment to thoughtful pedagogy. This research may be a contribution to that effort.

For children. While this study explores the lifeworld of adult play, it is ultimately about children. Children depend on the adults in their lives to guide and nourish their whole selves. Children are the definitive benefactors of the pedagogic tactfulness of adults in their lives.

Definition of Terms

I will define the following terms for clarification: play, scaffolding, pedagogy, and lifeworld.

Play

To define play is a complex endeavor. There is no straightforward definition; however, throughout history theorists and researchers have defined play by positing characteristics that describe play according to its purpose. Most experts agree that play is fun or joyful (Bergen, 2009; Eberle, 2014), imaginative and motivated by internal desires and needs (Bergen, 2009; Vygotsky, 1966). Play can begin with anticipation and curiosity, which may lead to discovery, pleasure, understanding, and strength of mind and body (Eberle, 2014). Young children will categorize a joyful activity of choice that can be shaped to fit experiences as play, but as soon as

the activity becomes controlled by others it may be perceived by the child as work (Bergen, 2009).

Most scholars would agree that play is easier to recognize than define. Describing play by its properties sometimes proves to be a less difficult task. Brown and Vaughan (2009) contend that play is “voluntary” and “done for its own sake” (p. 17). Play is “arousing”, provides the player “freedom from time” as he or she becomes fully engaged and less conscious of self (Brown & Vaughan, 2009, p. 17). Play is also “improvisational” and provides a “continuation of desire” (Brown & Vaughan, 2009, p. 17).

Play’s appearance of being purposeless is often debated in the literature. John Dewey (1913), philosopher, psychologist, and educator, noted play as “a name given to those activities which are not consciously performed for the sake of any result beyond themselves; activities which are enjoyable in their own execution without reference to ulterior purpose” (p. 318). Eberle (2014) posited that while play may often appear purposeless, it may yet “hold an abiding utility or deeper, more contingent objectives” such as when children rehearse adult roles through pretend play (p. 216). Vygotsky (1966) also viewed pretend play as critical to a child’s development; “through imagination children are liberated from situational constraints” (p. 11).

Despite the differing theories of play’s purpose, some scholars agree that play and learning are inextricably linked, and consider play necessary for children’s learning. Swiss genetic epistemologist Jean Piaget (1962) posited that children’s engagement and active exploration with their environment allows for construction of knowledge. He considered imaginary play as a time when children assimilate, or practice new knowledge. Dewey and others advocated for the inclusion of playful experiences in learning. As children engage in play, “they may pretend in a manner that reflects the experiences they have had; play becomes an imitation of life that serves to educate children” (Frost et al., 2012).

The quest to define play can quickly leave one lost in the weeds. For the purposes of this study, I contend that settling on an official definition is less important than the views of play held

by the adults who visit or work at the children's museum. Therefore, any activity described by a participant as play will be a suitable topic for exploration. An adult or child may exhibit any of the above characteristics within the context of the exhibits at the children's museum and be considered playing.

Scaffolding

Psychologist Lev Vygotsky (1966) viewed imaginary play as the mechanism by which the young child "becomes a head taller than himself" (p. 16). Through play a child is able to access his zone of proximal development, or level of optimal learning where it seems that he is "always above his average age, above his daily behavior" (Vygotsky, 1966, p. 16). Vygotsky's theory suggests that the role of the adult caregiver or more knowledgeable person in the play interaction is instrumental in scaffolding, or providing support for children by serving as the expert and gradually releasing responsibility so that the child eventually becomes fully responsible for his performance (Bodrova & Leong, 2001; Leong & Bodrova, 2012).

Pedagogy

Pedagogy is defined by van Manen (1997) as "the activity of teaching, parenting, educating, or generally living with children, that requires constant practical acting in concrete situations and relations" (p. 2). In the context of this study, pedagogy refers to the interactions between adults and children, as well as the decisions adults make regarding planning and programming related to children's play.

Lifeworld

According to van Manen (1997), lifeworld is defined as the "world of lived experience" and is considered to be "both the source and the object of phenomenological research" (p. 53). He identifies four "existential" lifeworld themes to serve as reflection and analysis: "*Spatiality* (lived space), *Corporeality* (lived body), *Temporality* (lived time), and *Relationality* (lived human relation)" (1997, p. 101). Any experience can be explored by way of asking questions, reflecting,

or writing related to these four existentials, which provide the grounding for how all human beings experience the world.

Conclusion

According to van Manen (1997), “Lived experiences gather hermeneutic significance as we (reflectively) gather them by giving memory to them” (p. 37). Phenomenological researchers begin their work reflecting on their own lived experiences of the topic under study. I began this chapter reflecting on my own memories of childhood play; perhaps you as the reader could benefit by doing the same. Take a moment to recall your most vivid memory of childhood play. Close your eyes and imagine the sights, sounds, and smells. How did you feel, and what do you think this particular memory means to you? It is through these reflections that we assign meaning to our lived experiences (van Manen, 1997). It is my hope that this caring act of exploring the adult’s lived experiences of play will result in more thoughtful ways of being with children.

CHAPTER II

REVIEW OF LITERATURE

Play grows on fields and in woods, on playroom floors, neighborhood pavements, and backyard playgrounds; and play organizes in stadiums, rinks, courts, and rings. In all these places and many others, disparate elements assemble into a process that comprises play. (Eberle, 2014, p. 214)

Children depend on the adults in their lives to nourish their bodies and minds as they grow. Many child advocates of today are concerned about the lack of opportunity for play in homes and schools, and agree that visiting children's museums is one way to incorporate play into children's lives. The following review of literature builds an argument that studying the adult experience of play at a children's museum is a worthy endeavor as part of a much-needed modern day child-saving movement. I begin the review with a brief examination of the history of play, including the early child-saving movement in the era of progressive reform. Following a discussion of the definition of play and its role in child development and learning, I juxtapose the benefits of play with the research regarding the diminution of play and the negative effects of play deprivation. The review ends with a discussion of the role of children's museums in a modern day child-saving movement, and positions adults as instrumental players in that process.

Play throughout History

We all have stories of play from our childhoods. Some of us have memories of roaming in fields or creek beds, while others have fond recollections of playing pick-up sports in neighborhood cul-de-sacs or going to parks with friends. Appreciation for children's play has

waxed and waned throughout history, yet the fact remains that we all grew up playing. Play occurs at all ages across all cultures (Van Hoorn, Nurot, Scales, & Alward, 2011). Stories of children's play may pre-date reflective thought regarding play (Frost et al., 2012). Accounts of children singing, dancing, and playing with toys such as marbles and balls date back to ancient Greek history (Caplan & Caplan, 1973; Frost, 2010). Early American history shows that Native American and colonial children played circle games and leapfrog in natural, outdoor environments (Chudacoff, 2007). Children on the frontier raced ponies, explored the wilderness, and played organized games with sticks and cans (Chudacoff, 2007).

Despite living in sometimes insufferable conditions, children have still played, and certain evidence leads many experts to believe that play has healing and therapeutic properties (Frost, 2010). Autobiographies and interviews document slave children swinging from grapevines, walking on stilts, and playing with toys handmade from scraps (Chudacoff, 2007; Frost, 2010). Children who lived during the Great Depression era turned chores into play as they plowed fields, planted crops, and cared for livestock (Frost, 2012). Impoverished immigrant children played games in the streets and on stoops in front of tenement houses in the overcrowded neighborhoods of early New York City (Frost, 2010). Creative, artistic play has traditionally engaged minds and bodies, fueled spirits, and helped children endure the times in which they lived. Holocaust survivors remember acting out fairy tales, secretly writing stories, or painting pictures to help cope with the horrors they had witnessed (Frost, 2010, 2012). There are documented cases of orphaned children in war-torn countries painting, singing songs, and writing poetry (Frost, 2010, 2012). Recent stories referencing troupes of volunteers in Europe playing with refugee children from Syria, Iraq, and Afghanistan pass by my social media newsfeed; images of traumatized children experiencing moments of joyful play are inspiring stories of hope and healing (Leach, 2016).

Play's Role in the Early Child-Saving Movement

The contributions of early philosophers and play scholars have influenced play related child advocacy efforts throughout history. In the late 19th and early 20th centuries, progressive-era ideals led advocates for social reform to join in what some call the early American child-saving movement, which was intended to improve the lives of homeless and impoverished children in cities crowded from the effects of immigration and the rising industrial revolution (Chudacoff, 2007; Frost, 2010). One of the most successful strategies for dealing with the plight of orphaned children in the cities was to send them by train to live with families in the Midwest (Frost, 2010). These *orphan trains* sent over 200,000 children from cities to farms, where they became part of families who valued the healthy combination of both hard work and play (Frost, 2010). The establishment of settlement houses was also a progressive attempt to provide services for those living in impoverished conditions. In 1892 social reformer Jane Addams established Hull House, a settlement house and center for philanthropic civic activities for Chicago's poor. Addams' belief that children's play was a basic human need and that opportunities for play could help "counter the effects of poverty and misery prevalent in American cities" inspired the first model playground on the grounds of the home (Frost, 2010, p. 71).

Continued efforts to protect children from abuse, poverty, and illiteracy resulted in more playgrounds, parks, recreation centers, gardens, and children's museums (Chudacoff, 2007; Frost, 2010). Influenced by the ideas of John Dewey, Maria Montessori, and Jean Piaget, the children's museum movement continued to grow throughout the 1900s (Mayfield, 2005). Children's museums were believed to be safe and stimulating spaces for education, play, and socializing and were an instrumental component to the reform efforts of the child-saving movement of the 20th century. Some would argue that a similar movement is needed today.

Play Un-Defined

Play has existed as long as children have lived. Most of us recognize when we are engaged in play, but how do we define it? All literature regarding children's play essentially

begins in the same manner: an acknowledgement of the lack of a clear, straightforward definition of play. For more than a century, scholars have debated play's definition, with research from a variety of fields providing layers of perspective. The work of each prominent play researcher reflects the individual's field of study. Historians present the chronological development of play of various cultures over time, doctors of psychiatry and medicine write about play from a biological and physiological perspective, and evolutionary psychologists help us understand the role of free play in children's natural learning, as well as the detrimental emotional effects of a lack of play. Scholars of early childhood education provide broad contexts for the comprehension of the importance of play in child development.

It seems that play is often easier to identify in our own lives than define. As humans we know when we are playing, but its definition eludes us. Because of the belief in play's power to elicit creativity and problem solving, scholars have spent much time debating the essential characteristics of play (Gray, 2013). Research professor and psychologist Peter Gray (2013) writes of three general points regarding play, the first being that "the characteristics of play all have to do with motivation and mental attitude, not with the overt form of the behavior itself" (p. 139). Identifying play involves knowledge of attitude and state of mind, rather than observable behavior. One person's play might be anything but play for another. Gray's second point (2013) regarding identifying play is that "play is not necessarily all or none" (p. 139). Playful attitudes blend and vary with other motives on a continuum from zero to 100 percent, with children achieving pure play more often than adults (Gray, 2013). Adults may often describe their own pure state of play as *flow*, a term used to describe an enjoyable experience that energizes and completely absorbs the mind so as to lose all sense of time and space (Csikszentmihalyi, 1990). Gray's (2013) third point is that play is not identifiable by one single descriptor, but is rather a "confluence of many characteristics" (p. 140). I discuss the characteristics of play commonly identified by scholars in the following section.

Essential Characteristics of Play

Most modern scholars of play agree that it is *voluntary, self-chosen, or self-directed* (Brown & Vaughan, 2009; Eberle, 2014; Gray, 2013; Rubin, Fein, & Vandenburg, 1983). Play is chosen and continued by the player because of his or her own will to continue, not by the will of adults or other players. A player directs his or her own actions during play, deciding when to play and when to quit. A study of kindergarten children showed that only the activities at school they participated in by choice, such as math games, block building, and listening to records, were considered play; all other activities assigned by the teacher were considered work (King, 1979).

Many experts also agree that play is often *focused by rules* which keeps it organized and interesting (Eberle, 2014; Gray, 2013). The rules in play exist not from an outside entity, but from the minds of the players (Gray, 2013). Some rules may be inherent to the chosen play medium, such as the deliberate use of certain building materials (Gray, 2013). A player may follow more formal rules in game play, but only because she or he voluntarily accepts those rules in a negotiated, democratic process (DeVries & Zan, 1994; Gray, 2013). The rules may be modified in a mutually accepted scenario that is still considered play by the children.

Scholars of play write about its *imaginary and non-literal* qualities (Brown & Vaughan, 2009; Gray, 2013; Rubin et al., 1983; Vygotsky, 1978). Play involves make-believe. Role-playing in fantasy scenarios requires rule-making of a different sort. These mental rules are related to social norms that one encounters in pretend play, such as the rules one follows while play-fighting (Brown & Vaughan, 2009; Gray, 2013). Playing house or pretending to be firefighters or superheroes requires its own set of rules, as children embody aspects of different characters (Brown & Vaughan, 2009; Gray, 2013).

Some scholars contend that people participate in play for its own sake, that the *means is more important than the ends* (Brown & Vaughan, 2009; Dewey, 1913; Eberle, 2014; Gray, 2013). John Dewey (1913) described play as “a name given to those activities which are not consciously performed for the sake of any result beyond themselves; activities which are

enjoyable in their own execution without reference to ulterior purpose” (p. 318). Players are typically intrinsically motivated and value the action of play more than the results. Vygotsky (1966) held the belief that children sometimes set their own purposes for playing, such as when they participate in athletic games.

Perhaps one of the simplest to identify characteristics attributed to play is that it is *pleasurable, or fun*, and players desire to continue doing it (Brown & Vaughan, 2009; Eberle; Rubin et al, 1983). For this reason, some may consider play as frivolous or trivial, which Gray (2013) writes is the beauty of its educative power. Eberle (2014) notes that play begins with pleasurable anticipation, as the player prepares and looks forward to the act. When play tasks are undertaken for only the sake of the joy they provide, learning can be a beautiful unintended consequence (Gray, 2013), and the player may enter an *alert, mental state of flow* (Brown & Vaughan, 2009; Csikszentmihalyi, 1990; Gray, 2013). This state of pleasurable play may afford the player “freedom from time,” as well as a “diminished consciousness of self” (Brown & Vaughan, 2009, p. 17). The player’s attention is focused in a non-stressed way, which has been identified as the prime mental state for learning (Gray, 2013; Rushton, Juola-Rushton, & Larkin, 2010).

Play’s Role in Child Development and Learning

Many theorists and play scholars contribute to the definition of play by describing its functions related to development of the child (Pellegrini, 2009b; Piaget, 1962; Vygotsky, 1978). Although there is much discussion in the literature about play’s apparent purposelessness and its emphasis of means over ends, most agree that play serves a deeper purpose that may or may not be immediately apparent (Brown & Vaughan, 2009; Eberle, 2014; Gray, 2013; Pellegrini, 2009b; Piaget, 1962; Vygotsky, 1978). Pellegrini (2009b) notes that play’s concern of means over ends allows the player to be “freed from constraints associated with using behavior effectively to get things done” and instead allows the player to focus on the actual behavior itself, enabling her or him to adjust and reorder the sequence of actions (p. 13). This allows the player to be in the

moment and unconcerned with the outcome of the behavior, while also reaping the benefits of participating in the behavior itself. These benefits may be obtained immediately, or be deferred until adulthood (Pellegrini, 2009a; Pellegrini & Smith, 1998).

While there are many theoretical lenses through which to view play, many early educators and philosophers studied play's role in learning. Aristotle, Plato, and Socrates studied play as they sought to understand human thought, expression, and knowledge acquisition (Frost et al., 2012). John Locke, British philosopher in the 17th century, viewed play as a necessary part of childhood for contributing to healthy physical bodies, attitudes, and spirit, but it was perhaps Immanuel Kant a century later who influenced the study of play's role in developing knowledge and reason (Frost et al., 2012). Piaget's work later expanded upon Kant's theories in his seminal work regarding play and mental development (Frost et al., 2012). Piaget posited that play is a reflection of a child's development, and his theories provide much of the foundational beliefs of play's role in cognition still today. He theorized that children construct their own understandings of the world through playful interactions with peers, adults, and objects in the world (DeVries, 1997; Piaget, 1962). It is through play that children assimilate and accommodate new knowledge into their existing schema, or their internal organizations of thought (Piaget, 1962). His view was that intellectual growth occurs when the child's reality is modified to incorporate the new experiences (Piaget, 1962). Children's development is reflected through play as they progress through certain stages of cognitive growth, from learning through senses as infants to thinking conceptually beyond age 12 (Piaget & Cook, 1952). As the child matures, she or he becomes capable of symbolic play; developing language and modifying it according to her or his needs (Piaget, 1962). This imitation through symbolic play allows the child to make sense of the environment. Play experiences support this development through the cognitive stages. For many years, Piaget's work has inspired educators and child-care practitioners to offer long blocks of uninterrupted play time, as well as to take special consideration of the kinds of play activities made available to the children in their care (Mooney, 2013). Knowledgeable adults who carefully

orchestrate play activities containing just the right amount of challenge provoke children into their own self-directed problem solving, therefore expanding a child's learning (Forman & Kushner, 1983).

Like Piaget, Vygotsky's (1966) theory regarding play's role in learning was a major contribution to the field of education. His view that social interactions with peers and adults influenced development still impact the way that educators shape curriculum (Berk & Winsler, 1995; Mooney, 2013). His theory of the zone of proximal development (ZPD) and concept of scaffolding provide a structure for engagement in activities at an appropriate level of challenge (Berk & Winsler, 1995; Vygotsky, 1966). Vygotsky's view that imaginary play provides children an avenue for acting out internal thoughts regarding the world around them placed further importance on the role of dramatic play in child development (Berk & Winsler, 1995). Through self-directed play children move through stages as intellectual needs change (Vygotsky, 1966). Vygotsky placed emphasis on the imagination, and conceptualized three components of make-believe play: the imaginary situation, the acting out of roles, and following the rules that the roles require (Puchner et al., 2001). Through role-play activities with peers and adults, children assign characters, follow rules, and act against impulses, which serves to enhance their learning (Berk & Winsler, 1995).

Others regarded play as integral to a child's formal schooling. German philosopher Friedrich Froebel, known by most as the father of Kindergarten, believed that play had a crucial role in education. Froebel institutionalized building with blocks in Kindergarten, as well as finger plays and circle time, which are still prevalent in most early childhood settings today (Frost et al., 2012). While play was not central to the views of Maria Montessori, her work in the medical field and as an educator contributed to the philosophy that learning should be an active process (Frost et al., 2012; Mooney, 2013). Her views on pedagogy have inspired child-centered educators to provide access to interesting materials and schedule large blocks of uninterrupted time for children to explore (Mooney, 2013). The work of pragmatic philosopher John Dewey helped to

legitimize play as fundamental in a child-centered curriculum. Influenced by the work of Piaget and Vygotsky, John Dewey (1902) theorized that children's play could facilitate educative experiences. He posited that learning occurred naturally through playful experiences where children were allowed to follow their interests, and that adults were to be the wise, guiding facilitators of those experiences. Dewey's progressive view that play, as a freely chosen activity, had implications for social relationships and therefore was crucial to curriculum as part of encouraging a democratic society influenced educators of his time (Dewey, 1916; Frost, 2010; Frost et al., 2012).

Benefits of Play

The literature regarding the essential characteristics of play and its role in children's development and learning illuminates its many benefits. Child development texts are ripe with affirmations of the benefits of play. "Play is essential for optimal development and learning in young children" (Van Hoorn et al., 2011) is the central theme of most early childhood educational materials. The benefits of play are generally not debated, but studied and described in great detail in regard to advocating for healthy childhoods.

Play's benefits to healthy physical growth need little explanation. Physical play contributes to the development of overall healthy bodies. As early as infancy, children begin to engage in exploring and playing to learn about the world in which they live. As a result, motor skills become increasingly advanced, which broadens the world of play (Frost et al., 2012). Muscle development, fine and gross motor control, flexibility, agility, balance, and coordination all benefit from the running, jumping, and climbing in which typical healthy children engage (Frost et al., 2012; Ginsburg, 2007; Miller & Almon, 2009).

Research in the area of cognitive science has repeatedly indicated that children's play and intellectual development are undeniably linked (Rushton et al., 2010). Beginning at birth, the brain's neurons are predisposed for programming through interactions and experiences (Frost et al., 2012; Rushton et al., 2010). These early experiences have a positive or negative impact on

brain growth and development. Joyful interactions filled with emotional connection nurture positive neural development, while deprivation or abuse can have negative consequences (Frost et al., 2012; Rushton et al., 2010). Scheduled recesses during the school day have also been proven to be beneficial to learning and behavior in school. This unstructured play time increases children's ability to pay attention, as well as their overall behavior in the classroom (Barros, Silver, & Stein, 2009).

Play's importance in healthy social and emotional development is also rarely challenged by professionals in the field, in fact, play therapy is recognized as a valuable treatment for children with social, emotional, or behavioral disorders (Bratton, Ray, Rhine, & Jones, 2005; Ray, Armstrong, Balkin, & Jayne, 2015). Experts specializing in medicine, psychology, and child development agree that through unstructured free play children learn how to make decisions, resolve conflicts, and regulate their own actions (Ginsburg, 2007; Gray, 2011). As children play, they consider the perspectives of others, which is the foundation for accepting differences, building empathy, and learning the mutual concessions and compromises that friendship requires (Brown & Vaughan, 2009; Murray & Ramstetter, 2013). To play is to practice life.

For humans, creating such simulations of life may be play's most valuable benefit. In play we can imagine and experience situations we have never encountered before and learn from them. We can create possibilities that have never existed but may in the future. We make new cognitive connections that find their way into our everyday lives. We can learn lessons and skills without directly being at risk. (Brown & Vaughan, 2009, p. 34)

Play is considered so important to the healthy development of children that the United Nations High Commission for Human Rights declared it as a right for every child (Office of United Nations High Commissioner for Human Rights, 1989). Yet, the fact remains that many children struggle to play.

Decline of Play

Several factors have contributed to play's gradual demise in homes and schools. The rise in passive entertainment through technological devices has caused children's outdoor free play to suffer, inspiring the term *nature deficit disorder* (Louv, 2005). Hours of sedentary activities spent with screens, such as watching videos or playing games cuts out time for social interactions or the type of play that contributes to healthy physical bodies (Milteer, Ginsburg, Council on Communications and Media Committee on Psychosocial Aspects of Child and Family Health, & Mulligan, 2012). Routines in childhood have also changed over the years due to the rise in single parent family structures or households with adults who work long hours (Ginsburg, 2007; Mintz, 2004). This absence of adult supervision at home combined with a lack of perceived safe spaces for play results in children being placed in more structured settings such as daycare or afterschool activities (Mintz, 2004). Today's parents also face a deluge of media pressuring them to provide their children with all the best academic, athletic, and artistic opportunities, resulting in overscheduled kids and harried lifestyles (Chudacoff, 2007; Ginsburg, 2007). The current neoliberal age of accountability and standardization of school curriculum focused on achieving high standards for all learners also makes it increasingly difficult to preserve the integrity of a playful childhood. The pressures of standardized testing and the pushdown of curriculum has caused many schools to restrict or completely eliminate play from the school day in exchange for a more intense focus on academics (Ginsburg, 2007; Gray, 2013; Murray & Ramstetter, 2013; Pellegrini, 2009b). The more progressive, child-centered approaches that would naturally incorporate play into the school setting are being replaced with more didactic methods for even younger children (Miller & Almon, 2009; Milteer et al., 2012). Creative arts and physical education programs are being eliminated, and after-school programs have shifted away from play to focus on academics (Miller & Almon, 2009; Milteer et al., 2012). Many schools have reduced, or even entirely eliminated recess from the school day (Murray & Ramstetter, 2013).

Effects of Play Deprivation

Perhaps the most convincing argument for the inclusion of play in homes and schools comes from examining the effects of lack of play, a phenomena which some experts have termed *play deprivation*. Reduction of play not only results in a loss of the positive effects on children's cognitive, physical, social, and emotional development, but also puts children at risk for the negative effects of the lack of play (Brown & Vaughan, 2009; Frost et al., 2012; Gray, 2011; Murray & Ramstetter, 2013). Deprivation of play may cause children's general health to suffer (Ginsburg, 2007; Gray, 2011; Milteer et al., 2012). Sedentary lifestyles put children at risk for childhood obesity, which increases risk of serious illnesses later in life (Miller & Almon, 2009; Milteer et al., 2012). Some psychologists warn that without play "young people will fail to acquire the social and emotional skills necessary for healthy psychological development" (Gray, 2011, p. 444). Corresponding with the decline of play is a documented decline in children's mental health (Gray, 2013). Some experts argue that as play has declined, rates of Attention Deficit-Disorder and other mental health disorder diagnoses have risen (Gray, 2011, 2013). Teachers have reported increased rates of defiance and aggression among even our youngest students (Wallis, Booth, Crittle, & Forster, 2003), and a recent article in the New York Times listed anxiety as the most common growing mental health issue among adolescents and adults (Denizet-Lewis, 2017). Sacrificing recess and playful opportunities in the curriculum for increased academics is argued to be counterproductive, resulting in children who struggle with limited energy, attention spans, and cognitive capacities (Barros et al., 2009; Ginsburg, 2007; Gray, 2011). Children from lower-income families may feel the negative effects most of all. Many of these children live in neighborhoods with increased violence and other dangers, decreasing their access to safe play spaces (Mildeer et al., 2012). The marginalization of recess from the curriculum may also disproportionately affect children in schools that serve under-resourced populations, as educators target these populations with academic rigor (Mildeer et al., 2012; Pellegrini, 2009b).

Some early childhood experts are concerned that not only is the amount of time devoted to play in schools and homes declining, but the quality and sophistication of children's make-believe play is regressing as well (Bodrova et al., 2013; Gray, 2011; Johnson et al., 2005; Murray & Ramstetter, 2013). In order for cognitively complex sociodramatic or construction play to occur, there must be sustained time in a child's schedule dedicated to this type of play (Johnson et al., 2005). Children engaging in complex play scenarios "need time to recruit other players, negotiate the roles to be enacted, agree on the story line to be dramatized, designate the make-believe identities of objects, and construct props that will be used in the dramatization" (Johnson et al., 2005, p. 261). According to Vygotsky's theory, this type of play must be at a mature level in order for children to benefit (Bodrova et al., 2013). In mature dramatic play scenarios, children take on specific roles and follow rules which they have created for extended periods of time, use object substitutes and gestures, are able to integrate many themes into their scenarios that sometimes last days or even weeks, and are able to plan extensively for play (Bodrova et al., 2013). There is evidence that play scenarios of children of multiple ages are more primitive than those of years past, which indicates that "present-day play at this low level can no longer foster skill development in the child's zone of proximal development" (Bodrova et al., 2013, p. 117). With these grim indications that children are spending less time in what are considered high-quality play activities, it becomes of significant importance that opportunities for play are valued and supported, particularly experiences where children are spending time with adults or other more knowledgeable peers who can scaffold them into mature play.

Some experts argue that more exposure to play will increase the quality of children's lives. "Play offers more than cherished memories of growing up, it allows children to develop creativity and imagination while developing physical, cognitive, and emotional strengths" (Milteer et al., 2012, p. e205). Can play save our children? The history of our nation's child-saving efforts provides a glimpse of how past reformers viewed the role of play in nourishing healthy childhoods.

The Role of Children's Museums in Child-Saving

The progressive, early-child saving movement inspired the founding of the first children's museum in Brooklyn, New York in 1899 (Frost, 2010; Mayfield, 2005). Still in existence today, the Brooklyn Children's Museum (BCM) was designed specifically for children and was an alternative to the museums of the time (BCM, 2018). Located in a Victorian mansion, the museum's participatory exhibits provided opportunities for children to engage with natural history, botanical, and zoological specimens, and eventually expanded to offer exhibits and programs related to space science, cultural and visual arts, as well as social and civic issues (BCM, 2018). Currently occupying over 100,000 square feet of indoor and outdoor space for exhibits, programming, and outreach activities designed to promote interdisciplinary learning through hands-on experiences, the Brooklyn Children's Museum paved the way for revolutionizing museum-going for children and their families (BCM, 2018).

Inspired by the work of Dewey and Montessori, children's museums grew in popularity throughout the 1920s (Mayfield, 2005). Similar to the Brooklyn Children's Museum, these early children's museums were some of the first efforts to provide stimulating, educational environments for children that incorporated learning through discovery. Children were encouraged to expand on their natural curiosities to learn more about themselves and the world in which they lived (Mayfield, 2005). The Children's Museum of Indianapolis (TCM)—founded by socialite and education advocate Mary Stewart Carey—was modeled after the Brooklyn Children's Museum (TCM, n. d. -b). Claiming to be the fourth museum dedicated to serving children in this way—following only Boston and Detroit Children's Museums founded in 1913 and 1917 respectively—The Children's Museum of Indianapolis has dedicated itself to providing educational, intellectual, and creative exhibits that appeal to children (TCM, n. d. -b). Unlike Brooklyn's exhibit collection which was largely purchased, Indianapolis community members—including schoolchildren—donated to the museum's initial collection of dolls, arrowheads, early clothing and furniture with which children were encouraged to interact (TCM, n. d. -b). After

opening in 1925 with approximately 600 objects to display, The Children's Museum of Indianapolis is now the world's largest facility of its kind— occupying an area of almost 500,000 square feet on 29 acres (TCM, n. d. -b). Children and their families can currently interact with paleontologists as they clean dinosaur fossils, build their own artworks based on artist Dale Chihuly's *Fireworks of Glass* exhibit, engage in sensory play activities with water and sand, dress up in the dramatic play area, and explore or play different musical instruments (TCM, n. d. -b).

Children's museums saw another growth period in the 1960s, as Piaget's work regarding children and their acquisition of knowledge became popular (Mayfield, 2005). Piaget's influence was seen in the purposeful inclusion of more hands-on, participatory exhibits that encouraged the child to actively engage with the environment through the use of motor skills and various senses (Black, 1990). Toward the end of the 20th century, the number of children's museums in the United States continued to surge. The 38 museums in 1975 had more than doubled by 1990 and continued to increase in the early 2000s (ACM, n. d.; Mayfield, 2005). Analysis of the stated missions and goals of approximately 250 children's museums of the time found that, although implemented uniquely at individual institutions, the broad mission of *learning through play* provided the foundation upon which exhibits were imagined and created (Mayfield, 2005).

The Association of Children's Museums (2012) defines children's museums as “cultural institutions committed to serving the needs and interests of children by providing exhibits and programs that stimulate curiosity and motivate learning” (p. 1). Currently in 2018, there are approximately 300 children's museums in the United States, with another 100 museums sprinkled across approximately 22 other countries in the world; the 400 museums are estimated to serve over 31million visitors annually (ACM, 2017). While children's museums vary in size, style, and exhibit content, generally their missions are the same as that of their predecessors: to provide an environment where children can explore, discover, learn, and play with the caring adults in their lives (ACM, 2017).

The Children's Museum Mission: Serving Families and Communities

Organized as non-profit entities essentially educational in nature, standards for professional practice in the field of children's museum education suggest that each institution develop a mission statement that is formally approved by a governing body, reviewed periodically, and revised when necessary (ACM, 2012). A mission statement should identify the intended target population and any related audiences as appropriate (e.g., children ages 2-12 and their families) as well as be the measurement tool by which all exhibits, activities, programs, or policies are evaluated (ACM, 2012). An institutional mission statement can be considered the lens through which all museum activities are examined; in this way an entity may benchmark progress and view change.

Evidenced by mission statements, the 21st century has seen the field of children's museum education shift from a focus on the individual child to considering the entire family during a museum visit. In 2001, The Children's Museum of Indianapolis officially transitioned from a child-centered focus to making family learning a priority (Foutz & Emmons, 2017). The museum's commitment to this change is evident in its mission to "create extraordinary learning experiences across the arts, sciences and humanities that have the power to transform the lives of children and families" (Foutz & Emmons, 2017, p. 179). The museum's philosophy regards the family—identified as at least one adult accompanied by a child under 18 with whom there is a sustained relationship—as vital in shaping the museum experience (Foutz & Emmons, 2017). The creation of an assessment inventory with indicators of family learning has enabled the museum to enhance current exhibits, and guide decision making and concept development.

The Boston Children's Museum also clearly promotes family learning in its mission, claiming to promote the joy of discovery learning for children and families through its exhibits and programs (BCM, 2018a). Commitment to this mission is evident in the various multicultural and multidisciplinary offerings for visitors of all ages (BCM, 2018a). The museum also

implements an extensive training program designed to help staff learn how to effectively engage both children and adult caregivers in meaningful interactions (BCM, 2018b). Developed in conjunction with the Chicago Children's Museum (CCM), a curriculum containing instructional materials and over 200 activities was reviewed and piloted by several museums across the country (BCM, 2018b; Porter & Cohen, 2012). Grounded in child development, family learning, and museum theory, the curriculum is free and available to any informal learning institution who wishes to help its staff gain more skills to engage entire families in meaningful play experiences (BCM, 2018b; Porter & Cohen, 2012).

Some museums see their role as instrumental in the education of the children in the community in which they reside. Port Discovery Children's Museum in Baltimore, Maryland claims to bring best educational practices to children and families, and emphasizes its role in being a positive influence on academic and life success (Port Discovery Children's Museum, 2018b). The museum has a long list of educational partners that donate time and resources to accomplish the mission of supporting the learning of children and their families (Port Discovery Children's Museum, 2018a). The Chicago Children's Museum, whose mission is to "improve children's lives by creating a community where play and learning connect" (CCM, 2018, para. 1), was founded in 1982 in response to program eliminations in the city's schools. The Chicago Children's Museum has grown to be the second most visited children's museum in the United States and serves more than 400,000 visitors annually (CCM, 2018). The museum reaches out to underserved communities throughout Chicago, offering resources for educators and innovative programs for schoolchildren (CCM, 2018). Similarly, the Detroit Children's Museum serves as an extension of the Detroit Public School system, only offering services to the students and families who qualify for Title I government assistance (Detroit Children's Museum, n. d.). The museum serves over 60,000 schoolchildren annually through outreach experiences, field trips, and weekend events (Detroit Children's Museum, n. d.). The museum also provides professional

development for educators and implements a lending program for teaching kits intended to enhance classroom learning.

Serving educators and schoolchildren are only one way that museums reach out into the broader community. Many children's museums partner with outside groups or agencies to support their local neighborhoods. The Children's Museum of Indianapolis has had great success working with local and state government to collaboratively fund projects to upgrade deteriorating area sidewalks and street lights with a Neighborhood Improvement Fund (TCM, n. d. -a). In addition, the museum is home to a full-service public library complete with resources for local children and families (TCM, n. d. -a). The Port Discovery Children's Museum, in collaboration with the University of Maryland Children's Hospital, takes its groundbreaking early childhood program to the community's neonatal intensive care unit and works to help parents develop strategies for nurturing the developmental and emotional needs of medically fragile infants (Port Discovery Children's Museum, 2016). The Children's Museum of Manhattan provides children and single mothers living in temporary housing access to art, music, health, and literacy experiences, with the main focus of empowering women with parenting and life skills (CMOM, 2017). The museum also works with community businesses to enact its commitment to inclusivity, offering special programs for diverse populations, such as LGBTQ families, hospitals, cancer centers, and children with special needs (CMOM, 2017).

Community members may view children's museums not only as places to gather and learn, but also to heal. After the tragic events of September 11, 2001 brought the loss of 297 residents of its community, The Staten Island Children's Museum responded with a unique project designed to help survivors cope with immense grief and emotional needs (ACM, 2005b). Along with various free events focused on supporting the mental health of its patrons, the museum introduced a new, permanent exhibit. The project, titled Ladder 11, featured an antique fire truck equipped with modern firefighting equipment. The community project and hands-on

exhibit provided a positive focus for the adults while also allowing children to express their emotions through role play (ACM, 2005b).

The Role of Adults in Children's Museum Play

Children's museums could not exist without the adults who are the dreamers, donors, practitioners, and patrons who believe in the child-saving cause. But what role do adults play in the day-to-day happenings in a children's museum? There are differing opinions in the literature regarding the role of adults in children's play, which is likely partially due to the complexity of defining play. When considering children's *free play*—regarded by scholars to be freely chosen and child directed—adult participation is sometimes viewed as intrusive and detrimental to the benefits of the play that would otherwise be gleaned (Farne, 2005; Ginsburg, 2007; Gray, 2011; Sutton-Smith, 1997). Unstructured free play is thought to benefit children in myriad ways, all contributing to building healthy bodies and minds (Ginsburg, 2007; Gray, 2011). Children's play with unfettered adult interference could potentially contribute to learning to share, negotiate, resolve conflicts, and self-advocate, among other important social-emotional skills (Ginsburg, 2007; Gray, 2011; Pellegrini & Smith, 1998). Some advocates of children's free play promote a supportive, but more hands-off role for adults. Gray (2013) discusses different styles of parenting in regard to children's play. He describes a "trustful" approach, which respects children's ability to make their own choices, take risks, and learn from their mistakes (Gray, 2013, p. 210). According to Gray (2013), an adult using this approach supports a child's need for healthy development by allowing her or him some degree of independence during play. Help is given when requested, and the adult's role is to provide the emotional and environmental support for the child to pursue and achieve his or her own goals (Gray, 2013). This approach stands in stark contrast to more directive, domineering, or overly protective roles which may quash a child's will and determination, and leave him or her feeling fragile, incompetent, or as if there is little or no control over the environment (Gray, 2013). Adults assuming the trusting role may choose to play

with children, but will be conscious of their role as an equal participant rather than a leader, and will follow the lead of the children (Gray, 2013).

This hands-off, trusting attitude is also somewhat prevalent in the field of early childhood among professionals who fear that interrupting play will inhibit children or disrupt play's therapeutic benefits; however, a different mindset regarding the adult's role in children's play challenges this notion (Johnson et al., 2005). Some early childhood scholars, particularly those versed in the work of Vygotsky (1966, 1978), promote the ideal adult role as being more facilitative and participatory (Bodrova et al., 2013). Literature regarding developmentally appropriate practice has long positioned play as an integral part of development and learning, with the adult role considered to be critical factor in not only preparing the environment, but scaffolding play as children develop and become ready for more mature forms of play (Bodrova et al., 2013; NAEYC, 2009). The National Association for the Education of Young Children (2009) promotes play as "an important vehicle for developing self-regulation as well as for promoting language, cognition, and social competence" (p. 14). An adult who is a facilitator of children's play may be mindful of children's needs of independence while also nurturing development and advancing *learning through play* (NAEYC, 2009). An effective teacher of young children is careful to prepare an environment that supports and scaffolds children's play in a variety of ways, often providing opportunities for children's free, self-directed play while also carefully inserting her or himself at just the right moment to make a suggestion, ask a question, or insert a story or other activity to inspire a child's playful imagination or advance development of a concept (Bodrova et al., 2013; Miller & Almon, 2009; Leong & Bodrova, 2012).

According to the literature in both early childhood and children's museum education regarding the role of adults in children's play, there is a continuum of adult involvement that ranges from no participation to dominating the scenario (Beaumont, 2010; Johnson et al., 2005; Swartz & Crowley, 2004). The roles at the mid-point of this continuum are generally considered

to be the most facilitative of the *learning through play* mission of most children's museums (Johnson et al., 2005). Figure 1 provides an illustration of this continuum.

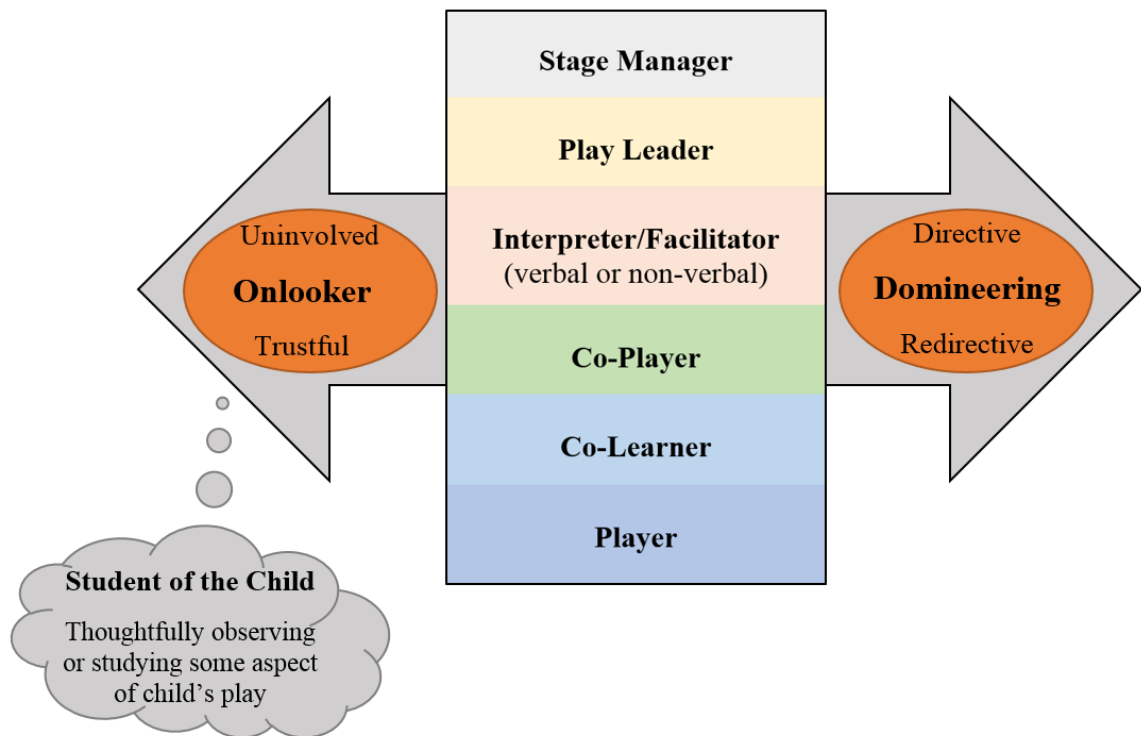


Figure 1. Adult Roles in Play.

An adult described as an *onlooker*, or observer, may stand away from the child and intervene only when the child requests help (Johnson et al., 2005). This adult may be located near the playing child, but does not join in or interrupt the play. An adult serving in this role may appear to be uninvolved in the child's play, when in fact the opposite may be true. Beaumont's (2010) description of *student of the child* fits this scenario. An adult in this role may appear to be a passive bystander, yet may in fact be thoughtfully observing or studying some aspect of the child's play. This role is revealed through conversations with observing adults, who often mention their efforts to make connections to the child's development, or discuss their plans to

extend the child's play in their own homes (Beaumont, 2010). Wood and Wolf (2010) specifically investigated this adult role in children's museums and determined that parents who observe their children do so from one of three different stances: 1) a neutral stance, but following the child's lead; 2) a neutral stance, but paying attention to the child's learning; 3) a supervisory stance in order to regulate the child's play. The parents in the study who exhibited a neutral stance, yet paid attention to the child's learning were more apt to direct the child briefly, then stand back and gauge not only the child's success with the exhibit activity, but also the child's efforts to self-correct without adult intervention (Wood & Wolf, 2010). Brief interventions may occur before the child's play continues, resulting in positive learning for both adult and child (Wood & Wolf, 2010).

Johnson et al. (2005) describe the *stage manager* role as the adult who still observes the play episode without entering, but plays an active role in helping children prepare and carry out the play act. This adult may gather materials at the child's request, help create costumes or props, or assist in other ways that enable the children to extend a play scenario (Johnson et al., 2005). This role might be typical of adults who work with children in preschools, or who serve as staff and/or volunteers in a children's museum setting.

The roles of *co-player* and *play leader* describe adults who fully participate and engage in children's play (Johnson et al., 2005). A co-player will take on a minor role, serving as an equal participant in the play scenario, while a play leader exercises more influence and takes thoughtful steps to enhance and extend the play (Johnson et al., 2005). In a children's museum setting this may also be described as a *co-learner*, where the adult is an equal partner and learning alongside the child (Beaumont, 2010). An adult in this role may work collaboratively with a child to figure out how an exhibit works or to solve a problem at the exhibit, authentically involving the child in the activity's solution (Beaumont, 2010).

Beaumont (2010) also describes the adult who is the most fun to watch in a children's museum setting—the *player*. Adults in the player role may be playing with a child—initiated

either by the child or adult—or just having fun alone, sometimes even making up games themselves.

Each of the roles described thus far are considered at some level to be facilitative of children's play. Beaumont (2010) offers a specific description of a *facilitator* of children's play as a "non-verbal role where the adult is scaffolding and reinforcing what the child is doing through cues and prompts" (p. 49). Using one's body to move closer to a child or physically manipulate part of an exhibit would be considered being in the facilitator role, as would the use of an encouraging gesture, such as a smile or nod (Beaumont, 2010). Similar to the facilitator role, Beaumont (2010) describes an *interpreter* as a verbal role an adult assumes when using language to encourage or prompt a child. An interpreter might use phrases such as, "Good job!" or "Way to go!" and might also narrate actions the child is performing or explain concepts the child is investigating (Beaumont, 2010). An interpreter will answer a child's question and may also ask questions in order to encourage a child's thinking, such as "What do you think is happening here?" or "What do you think we should do now?" (Beaumont, 2010).

Johnson et al. (2005) describe the adult roles outside of the mid-point of the continuum of facilitative involvement as more precarious and detrimental to the mission of learning through play. Negative consequences occur more typically when adults in a classroom setting are *uninvolved* in children's play (Johnson et al., 2005). In a children's museum setting this is likely to result in less elaborate or creative play scenarios, or superficial learning (Downey et al., 2010; Puchner et al., 2001; Shine & Acosta, 2000). At the other end of the spectrum is the *directive*, or *redirective* role that an adult sometimes assumes, most often in the interest of academic teaching (Johnson et al., 2005). An adult in the directive role remains outside of the play scenario while giving children instructions; a redirector interrupts the play scenario to ask questions that are meant to bring children back to reality (Johnson et al., 2005). Both roles either limit or stifle children's creativity and learning during play. Beaumont's (2010) description of the *supervisor* of children's play is similar. While some adult supervision is obviously necessary throughout a

children's museum visit, an adult assuming this role is described as having a main goal of monitoring the child, with safety as the priority (Beaumont, 2010). An adult in this role stays physically close to the child, looks around often, and pays particular attention to the child's interactions with others, ready to step in if a child exhibits signs of frustration or discomfort (Beaumont, 2010).

Defining Learning through Play

How do children's museums currently define play and communicate its role in learning? In 2015 the Children's Museum Research Network was created with support by a grant from the Institute of Museum and Library services (Luke, Letourneau, Rivera, Brahms, & May, 2017). Through this grant the Association of Children's Museums and the University of Washington's Museology Graduate Program joined forces to achieve the goal of cross institutionally advancing research in the field. Ten children's museums across the nation agreed to participate in multiple ongoing research studies, five of which were participants in the first study to examine museums' beliefs about play and learning (Luke et al., 2017). An examination of each museum's mission and learning framework—its implementation of ideas and beliefs of learning in a children's museum setting—revealed varying degrees of emphasis of play in each, as well as differences in the positioning of play and its role in learning (Luke et al., 2017). While three of the museums specifically included play as a central focus of its mission and framework, the remaining two museums excluded play, instead focusing on other outcomes related to achievement, sometimes in an effort to align with local schools (Luke, et al., 2017). Only one institution defined play and used the definition throughout its framework. Staff at two of the remaining museums spoke about play as being a focus of their work, although neither could offer a definition or explanation beyond very general aspects of play. Museum staff articulated different conceptualizations regarding the meaning of play, such as “joy”, “fun”, “active engagement”, or “freely chosen” (Luke et al., 2017, p. 42-43). Most staff members felt that play was connected to learning in some

way, but wasn't the same as learning, evident by responses such as "children learn best through play" or defining play as the "entry point" to learning (Luke et al., 2017, p. 43).

One implication of these findings is that play may take on different meanings, even among museum practitioners who view play as central to their mission (Luke et al., 2017). The authors suggest that children's museums as institutions, as well as the larger field of children's museum education could be strengthened if they were to "fully wrestle with, identify, and articulate beliefs about play and its connection to learning" (Luke et al., 2017, p. 44). While the authors suggest that variety in children's museum missions is positive for the field, establishing a common language surrounding play and its relationship to learning—especially for those who claim learning through play is their core mission—would be valuable for developing learning frameworks, communicating to patrons, and appealing to donors (Luke et al., 2017).

Children's Museums and Visiting Adults: Differing Agendas and Beliefs

Children's museum practitioners overwhelmingly consider the participation of adults to be critical in advancing their mission of learning through play. Adults in facilitative roles are considered to be a crucial element for providing high quality experiences for the visiting children (Downey et al., 2010; Puchner et al., 2001; Riedinger, 2012; Shine & Acosta, 2000). However, differing missions, agendas, and beliefs about play may create misunderstandings between museum practitioner expectations and their perceptions of the actions of visiting adults (Downey et al., 2010; Shine & Acosta, 2000; Wood & Wolf, 2010). Considering the experiences of all adults who visit and work in children's museums will help the understanding of all involved.

CHAPTER III

METHODOLOGY

Is this not the meaning of research: to question something by going back again and again to the things themselves until that which is put to question begins to reveal something of its essential nature? (van Manen, 1997, p. 43)

My philosophical beliefs about the nature of reality and knowledge construction color the lens through which I see the world. The ontological and epistemological views I assume impact the choices I make as a researcher. Before I began to investigate the play experience of adults in a children's museum, I had to first explore and make transparent my place to stand (Denzin & Lincoln, 1994). The purpose of this chapter is to illuminate and justify the research paradigm that underpins my study, and to describe the methods through which this work was undertaken. I have organized it into the following sections: Research Paradigm, Methodology, Theoretical Framework, Methods, Analysis, Ethical Considerations, Limitations, and Trustworthiness.

Research Paradigm

Questions regarding methods of research come after questions of paradigm, which Guba and Lincoln (1998) define as “the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways” (p. 195). As a researcher, I must ask myself the following fundamental ontological and epistemological questions (Guba & Lincoln, 1998; Lincoln & Guba, 2013): What is the nature of reality and what can be known about it? What is the relationship between me as the knower and

what can be known? My answers will be the driving force behind the determination of research methodology.

Constructivism

The theoretical underpinnings that frame this research were formed early in my career as a teacher working with young children. In my quest to become a better teacher of mathematics, I encountered the work of Jean Piaget and Constance Kamii. Piaget studied young children in order to gain understanding of how humans construct knowledge. His work stood in direct opposition to empiricist views that individuals are *tabula rasa*, or blank slates waiting to assume the truth that exists outside of the mind in the external world. While both Piaget and empiricists placed importance on experiences in learning, Piaget's work emphasized the construction of knowledge within the mind of the individual as a result of action and reflection through experience (Kamii & Ewing, 1996). He theorized that through logico-mathematical reasoning, individuals interpret empirical data to either *assimilate* new information with knowledge from prior experiences, or change their existing schema to *accommodate* the new learning (Kamii & Ewing, 1996; Piaget, 1954).

Kamii's work with children's problem-solving strategies in mathematics helped make Piaget's theory accessible to me as an elementary educator. Her research supported the notion that knowledge is mentally constructed by the individual as he or she interprets reality. Through logic and reason, new learning is integrated with prior knowledge. The focus in my first grade classroom shifted from a more didactic approach of finding one correct answer to instead inventing many possible solutions to a problem. Instead of the truth-knower, I became a guide. My students and I both learned; their understandings of mathematics deepened while I became more mindful of the process of learning. I became acutely aware that this new way of being with children fostered many correct answers, rather than one. Suddenly, each child sought his or her own truth rather than my truth.

Constructivists view learning as an active, collaborative process. Experiences with the physical world, as well as those with peers and adults are all viewed as essential for intellectual and social development (DeVries, 1997). Both Piaget and Vygotsky emphasized the significance of interactions with peers and more knowledgeable others in learning (DeVries, 1997). As an educator, I saw the importance of social interaction and collaborative problem solving, in the classroom as well as on the playground. Learning became a cooperative social endeavor, as students constructed knowledge together through their work and play.

Constructivist theory is paramount to the philosophy of children's museum practitioners, as most programming and exhibits are designed to encourage interactive, collaborative experiences for children and their families. Museum visitors of all ages integrate new learning experiences with prior knowledge. As both children and adults interact with people and exhibits, previous experiences will affect how they view the new experiences. As a result, each visitor experiences his or her own unique interpretation of reality. Understanding these multiple realities is critical in determining how and why adults in a children's museum behave the way they do.

Methodology

Constructivist theory underpins my research philosophy as I seek to make meaning of the adult play experience at a children's museum. The concept of multiple interpretations of reality is a fundamental theoretical view of a constructivist research paradigm. Rather than an empiricist or traditional view that there is one tangible reality to be discovered, constructivist research assumes that individuals know reality only through their interpretation (Kamii & Ewing, 1996; Piaget, 1954). Knowledge is subjective as researcher and participant create understandings in the natural setting (Denzin & Lincoln, 1994; Lincoln & Guba, 2013). Viewed as an interpretive stance attending to making meaning, constructivist research involves studying not only actual events and situations, but also the "particular and individual mental stances which impute meaning to those events and situations" (Lincoln, 2005, p. 60).

The use of qualitative research methodologies affords researchers the opportunity to gain understanding and describe meaning in the lives of individuals (Denzin & Lincoln, 1994). Multiple interpretations of reality are exposed as researchers strive “to make sense of, or interpret, phenomena in terms of the meanings that people bring to them” (Denzin & Lincoln, 1994, p. 2). A qualitative researcher employs multiple strategies and approaches, artistically piecing them together as a *bricoleur*, constructing a final product, or *bricolage* that provides insight or greater understanding of a problem or phenomenon (Denzin & Lincoln, 1994; Weinstein & Weinstein, 1991). A bricoleur is knowledgeable of the many interpretive paradigms, and is cognizant that the stories he or she tells are positioned within these specific research traditions (Denzin & Lincoln, 1994). When piecing together the research methodology, theoretical framework, and subsequent methods for this study, it is important that all align conceptually with the constructivist, interpretivist research paradigm. All approaches and strategies must honor the multiple interpretations of reality of adult museum visitors and support and guide the reciprocal, ongoing meaning making that occurs between the participants and researcher.

Hermeneutic Phenomenology

Max van Manen (1997) writes of the relationship between theory and methodology, stating that “methodology is the theory behind the method” or a “philosophic framework” which includes the “general orientation to life, the view of knowledge, and the sense of what it means to be human” (p. 27). To engage in hermeneutic phenomenological research is to question the way we as humans experience the world. According to van Manen (1997), this pedagogical act of questioning, knowing, and being in the world helps one to become more fully part of the world. While phenomenology and hermeneutics are each distinctive modes of inquiry, some argue that they are difficult to separate. I will define them separately below, and discuss how they work together in my quest to both describe and interpret the lifeworlds depicted in this study.

Phenomenology. Phenomenology has roots in philosophy that date back to the early 20th century with philosophers such as Edmund Husserl—to whom many refer as the father of

phenomenology—Heidegger, Merleau-Ponty, and Sartre (Vagle, 2014). It is important to note that phenomenology is not a singular, unified philosophy or research method, but pluralistic in that it has been imagined and re-imagined by many (Vagle, 2014). Phenomenology is the study of people, and lived experience (van Manen, 1997). In a broad sense, it is a “theory of the unique” (van Manen, 1997, p. 7). It is the study of the essence, or nature of a phenomenon.

Phenomenology can be described as an encounter—an experience of knowing—that is sometimes faintly felt, yet other times deeply impactful and etched into memory (Vagle, 2014).

I contend that phenomenology can be viewed as a constructivist methodology, because both at the core are concerned with the constructed reality of the individual. Phenomenology doesn’t just ask *what* or *how*, it seeks to understand the full *whatness* or essence: the individual’s experience from within. It is qualitative in its approach and systematic with its questioning techniques, explicit in its reporting, and self-critical as it continually examines its aims and methods (van Manen, 1997).

Phenomenological research and writing are kindred, pedagogically inseparable activities (van Manen, 1997). Phenomenological writing is descriptive in nature. My task as a human science researcher is to use rich, descriptive language to “make intelligible and understandable what always seems to lie beyond language” (van Manen, 1997, pp. xvii-xviii). Through writing and rewriting, certain individual truths are uncovered while retaining the uncertainty of experience (van Manen, 1997).

Hermeneutics. In seeking to understand adult play at a children’s museum, words seem beyond reach, and description hardly seems enough. Description alone fails to reveal the true meaning of lived experience because of the hidden nature of these meanings (van Manen, 1997). Where phenomenology is descriptive, hermeneutics is interpretive, and necessary for understanding (Moustakas, 1994; Polkinghorne, 1983; van Manen, 1997). According to van Manen, hermeneutics is defined as “the theory and practice of interpretation” (van Manen, 1997, p. 179) and “describes how one interprets the ‘texts’ of life” (p. 4). Hermeneutics aids where

description alone fails. Like phenomenology, hermeneutics is also language dependent with textual reflection paramount as method (van Manen, 1997). The use of semiotics—the study of words, images, sounds, gestures, and objects—is fundamental as a means of interpretation and communication (Chandler, 2007; van Manen, 1997). Meanings are made and reality is represented through the signs and systems of language expressed by the individual (Chandler, 2007).

A constructivist paradigm is hermeneutic by nature (Lincoln & Guba, 2013). Research, writing, description, and interpretation join for greater understanding between the researcher and subject, as well as researcher and reader.

Theoretical Framework

Theory frames research. It provides an organization for identification of themes as well as a structure for exploring the connections between them (LeCompte & Preissle, 2003). Theory is “a unique way of perceiving reality, an expression of someone’s profound insight into some aspect of nature, and a fresh and different perception of an aspect of the world” (Silver, as cited in Anfara & Mertz, 2015, p. 2). In the following section, I will discuss two related frameworks that were considered for both data collection and analysis of the adult play experience in the children’s museum.

Four Existentials

Hermeneutic phenomenology has its own profound framework. According to van Manen (1997), four existentials or structures of meaning may be used as a basis for reflection in the practice of research: “*Spatiality* (lived space), *Corporeality* (lived body), *Temporality* (lived time), and *Relationality* (lived human relation)” (p. 101). These four existentials are considered to belong to the fundamental structure of the lifeworld of all individuals, although experienced in different ways (van Manen, 1997).

Spatiality. Lived space refers to how an individual feels space (van Manen, 1997). Lived space affects emotion (van Manen, 1997). Special memories of a time or event are often tied to the space where the occasion occurred, such as memories of home, or play as a child (Sandberg, 2003; van Manen, 1997). The experience at a children's museum is likely affected by the way the individual feels the space he or she is in.

Corporeality. Lived body refers to the way an individual is present in the world. The body is the representation of the self in the world; physical presence both reveals and conceals something about individuals (van Manen, 1997). It is through the body that interactions with others occur. Adults in children's museums communicate with children through physical acts, though not always consciously or deliberately.

Temporality. The concept of lived time is subjective (van Manen, 1997). Felt time is a perception. While a contented state of flow can make time appear to pass quickly, a miserable experience may seem painfully long. The temporal lives of individuals affect their interpretation of the world; past experiences leave impressions and future aspirations influence actions (van Manen, 1997). Adult behavior in a children's museum may be influenced in part by memories of past events or anticipations of times to come.

Relationality. Human beings search for fulfillment through connections with others. Beyond being present in the physical sense, individuals share interpersonal space with others (van Manen, 1997). The pedagogic relationship between parent and child is highly unique and personal, and ideally provides the child with a sense of guidance and support (van Manen, 1997). In a children's museum setting, social interactions are a significant part of the experience.

Space, body, time, and relationships each play a role in shaping the adult play experience in a children's museum. The following similar frameworks by Falk and Dierking (1992, 2000) provide a complementary view.

The Contextual Model of Learning

As the number of people who visit children's museums continues to grow, those interested in the vitality of the museum community strive to better understand the experiences of the visitors. In an effort to better understand the museum experience from the multiple perspectives of the visitors, Falk and Dierking (2000) created a framework—the *Contextual Model of Learning*. First published as the *Interactive Experience Model*, the framework initially served as a lens through which to view the wealth of information that existed in the literature regarding visitors' experiences in any institution where informal learning might occur: natural or art history museums, zoos, botanical gardens, children's museums, or others (Falk & Dierking, 1992). As a result of further study, Falk and Dierking (2000) enhanced this initial framework to not only reflect the general experience of a museum visitor, but to also provide a mechanism for exploring and communicating the complex nature of learning that occurs in any museum-like space. The current framework—the *Contextual Model of Learning*—illustrates three overlapping contexts of making meaning within a museum, each a lens through which to view a visitor's experience: the *Personal*, *Social*, and *Physical Contexts* (Falk & Dierking, 2000). The interaction of these continuously constructed contexts contributes to each visitor's unique interpretation of reality and overall experience in the museum (Falk & Dierking, 1992). This framework includes a new dimension that was not present in their earlier model: time. The authors contend that viewing the museum experience as a one-time snapshot is inadequate for fully understanding the meaning-making that occurs, and they propose learning is “constructed over time as the individual moves through his or her sociocultural and physical world; over time, meaning is built up, layer upon layer” (Falk & Dierking, 2000, p. 11). Figure 2 provides an illustration of both models.

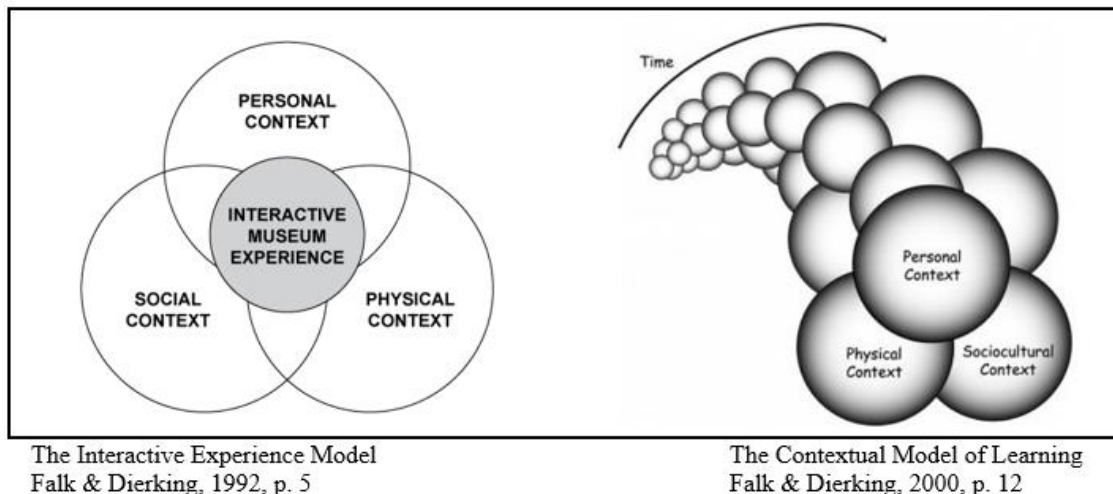


Figure 2. Models of Museum Experience. Reprinted from Falk, J.H., & Dierking, L.D. (1992). *The museum experience*. Washington, DC: Whalesback Books. Falk, J.H., & Dierking, L.D. (2000). *Learning from museums: Visitor experiences and the making of meaning*. Walnut Creek, CA: Alta Mira Press. Reprinted with permission.

Neither the *Interactive Experience Model* nor the *Contextual Model of Learning* address the concept of play specifically; however, I propose that both models are appropriate as frameworks for examining the *whatness* of all play experiences within a children's museum. When adults and children are interacting in a museum with the mission of *learning through play* the waters separating play and learning become murky. In a stimulating, free-choice environment, both playing and learning occur simultaneously; therefore, I would argue that play is not absent in these frameworks, but that it is everywhere. Additionally, while the model was originally developed for consideration of the experience of the museum visitor, I reason that it can also be applied to the experience of museum staff or volunteers.

During the process of my own knowledge construction, I created a modified version which combines both models: the *Interactive Experience Model* and the *Contextual Model of Learning* (see Figure 3). I will discuss each context as Falk and Dierking have envisioned them, while also considering the synergetic relationship between learning and play; thus, the children's museum experience.

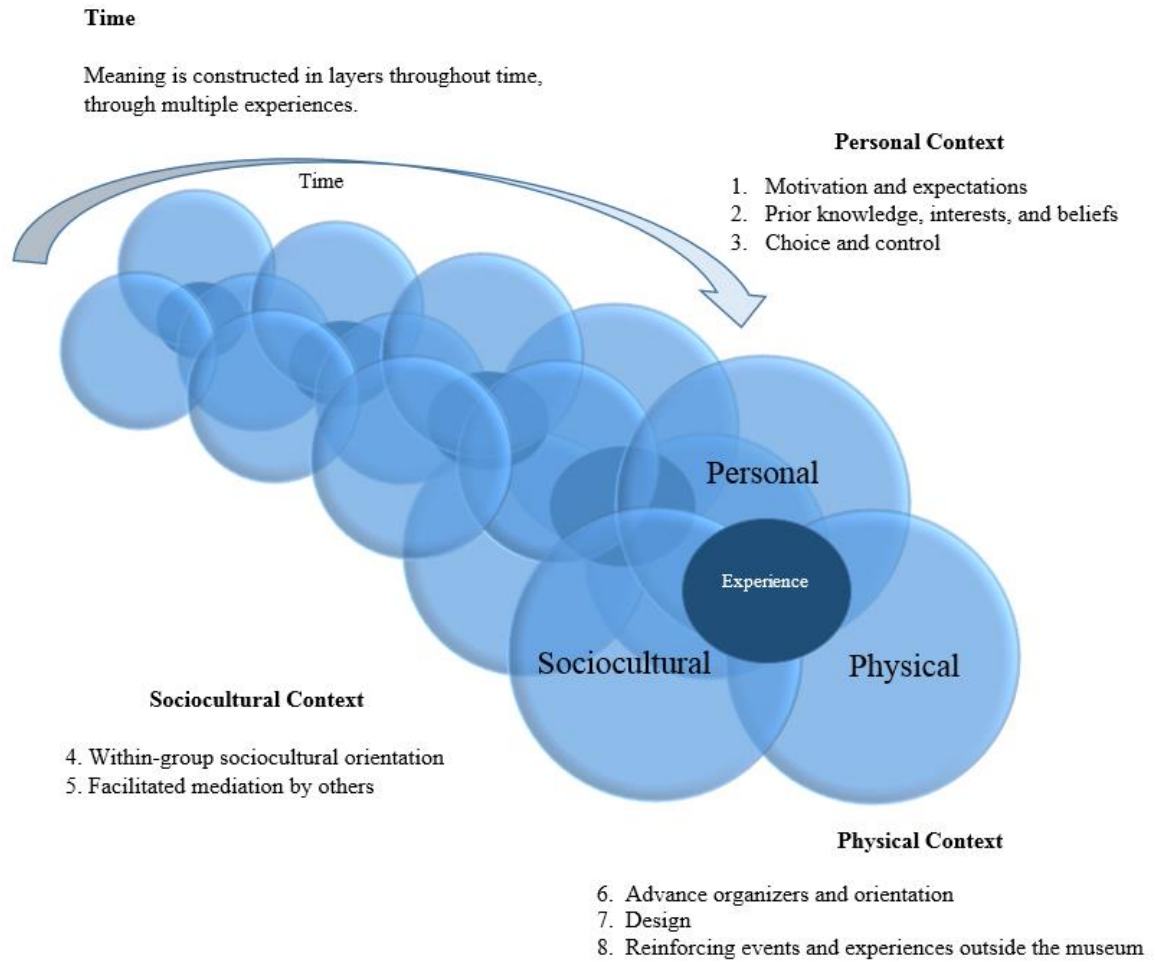


Figure 3. Re-creation of Falk and Dierking's Models (1992, 2000), Combined. Adapted from Falk, J.H., & Dierking, L.D. (1992). *The museum experience*. Washington, DC: Whalesback Books. Falk, J.H., & Dierking, L.D. (2000). *Learning from museums: Visitor experiences and the making of meaning*. Walnut Creek, CA: Alta Mira Press.

Personal context. According to Falk and Dierking (1992, 2000), the *Personal Context* has perhaps the strongest influence on an individual's museum experience. This context includes factors regarding motivation, expectations, prior knowledge and interests, as well as elements related to choice and control. A person's motivation is affected by his or her interests and agenda while being in the museum, as well as expectations about what will occur. Both adults and children are more motivated when they are allowed to exercise choice and control in the environment. Falk and Dierking (2000, 2010) argue that self-motivated, free-choice experiences

are more satisfying and rewarding, resulting in more knowledge construction than more didactic experiences, which are typically associated with schooling. While the assumption regarding learning, particularly science content, is that children learn best in school, their contention is that the vast landscape of informal learning opportunities account for the majority of the science learning in our United States (Falk & Dierking, 2010). Informal learning spaces such as children's museums promote intrinsic motivation; people are more likely to participate and learn because they want to rather than because they have to (Falk & Dierking, 2000, 2010). The process of knowledge construction is affected by each individual's background and prior experiences. New learning is assimilated or accommodated with the individual's existing schema, resulting in a unique, highly personal experience (Falk & Dierking, 2000; Kamii & Ewing, 1996; Piaget, 1954).

Sociocultural context. Learning and playing, particularly in a children's museum setting, is a social endeavor. It is clear that visitors spend a large amount of their time engaged in social interactions, and that "the most fundamental aspects of learning, including perception, processing, and meaning-making are socioculturally constructed" (Falk & Dierking, 2000, p. 42-43). One's own culture, as well as the culture of the museum setting, influences the knowledge that is constructed. Individuals typically visit children's museums with family or school groups, and the interactions they have with others shape the museum experience. Social psychologists such as Lev Vygotsky (1966) and Albert Bandura (1977) theorized that individuals construct knowledge with the aid of others (Falk & Dierking, 2000). The *more knowledgeable others* may model certain actions which enable the learner to develop self-efficacy (Bandura, 1976), or they may provide scaffolding (Vygotsky, 1966) for the learner which enables them to enter their *Zone of Proximal Development* (ZPD): the distance between the child's actual level of development and the potential point a child could reach with the help of a more knowledgeable person (Vygotsky, 1966). In a children's museum setting, the *more knowledgeable other* is sometimes a peer, although it is more likely an adult parent, caregiver, museum staff, or volunteer.

Physical context. Falk and Dierking (2000) contend that the physical setting influences the museum experience. Memories of museum visits are often linked to the physical space or size of the exhibits (Falk & Dierking, 2000; Piscitelli & Anderson, 2001). The design of pathways and exhibits affects how individuals in the museum interact with people and objects in the space. Certain aspects of physical space can invoke emotion (Falk & Dierking, 2000). The feelings associated with the space influence what a human being remembers, which affects the learning that occurs (Falk & Dierking, 2000). “Both psychological and neuroscience research have confirmed that learning is always rooted in the realities of the physical world, even if abstractly, though typically the relationship is extremely concrete” (Falk & Dierking, 2000, p. 58). Learning is often so embedded in the physical world that transferring the learning to different contexts is difficult (Falk & Dierking, 2000). Groups of schoolchildren on field trips to museums learn the most when attempts are made to bridge the work at school to the experiences available at the museum (Anderson, Lucas, Ginns, & Dierking, 2000; Falk & Dierking, 2000).

Framework Model

The combined works of van Manen (1997) and Falk and Dierking (1992, 2000) provided a unique lens through which the adult play experience in a children’s museum could be viewed. The different, yet complementary frameworks illuminated the multifaceted layers of the adult experience in a children’s museum. Figure 4 illustrates the relationship between the two frameworks.

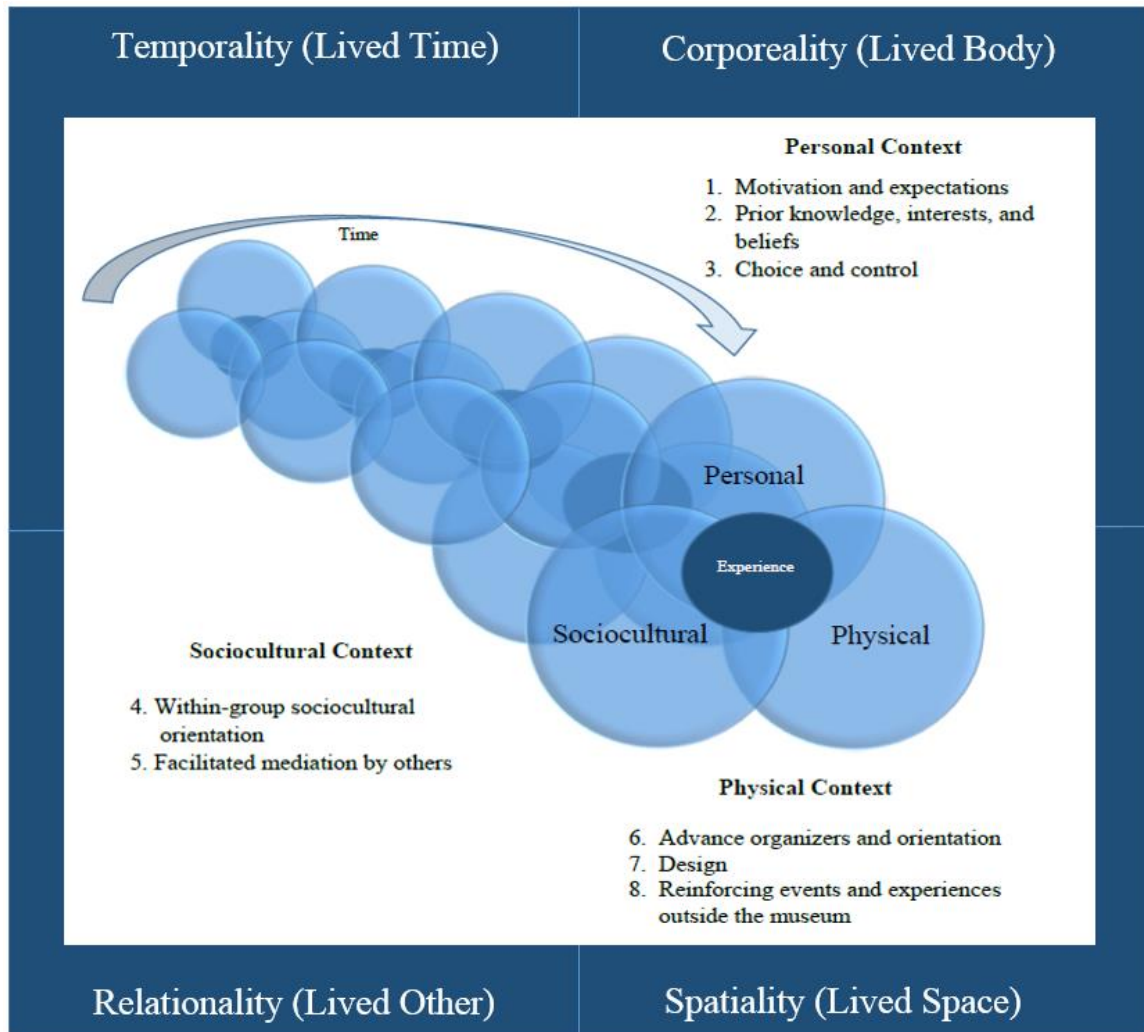


Figure 4. Falk and Dierking Combined Model with van Manen's Existentials. Adapted from Falk, J.H., & Dierking, L.D. (1992). *The museum experience*. Washington, DC: Whalesback Books. Falk, J.H., & Dierking, L.D. (2000). *Learning from museums: Visitor experiences and the making of meaning*. Walnut Creek, CA: Alta Mira Press.

The elements of the framework—the personal, physical, sociocultural, and temporal contexts as well as the existential concepts of body, space, time, and human relation—provided a structure for the research questions, purpose, and problem, as well as for the data gathering and analysis methods.

Methods

My philosophical stance served as a guide for all subsequent methods. While hermeneutic phenomenological research is inclusive of all scholarly principles of qualitative inquiry, it is not prescriptive; rather, inherent within phenomenology are certain strategies of inquiry that are considered to be scholarly methods for gathering and analyzing the data of human science research, which are human experiences (van Manen, 1997). Aligning within the constructivist research paradigm, the hermeneutic phenomenological methodology and theoretical frameworks influenced the strategies I utilized to gather and analyze data. The methods of data gathering described in the following section resulted in anecdotes that work collectively to portray these experiences.

Setting

Phenomenological research requires data gathering in the natural setting of the phenomenon under study. My research occurred at a children's museum in a small midwestern city with a population of approximately 50,000 residents. The children's museum is relatively small, housing 15-17 exhibits or activities at one time. Most of the exhibits are contained within one main room, which is divided into areas for each conceptual theme. The children's museum primarily serves children under the age of 12 from six local elementary schools, as well as schools from neighboring towns through field trips and special programming. A local university adds 22,000 more students to the city's population, many of whom have young children who potentially benefit from the offerings of the children's museum. The children's museum encourages partnerships with the university, encouraging student volunteerism, class projects, and research studies.

Participant Selection

The participants in this study were 17 adults ages 18 and over who worked, volunteered, or brought children to the museum. Participants who were visiting adults were both first-time and repeat visitors. I used purposeful sampling to determine which participants to select for the initial

observation. I purposely chose visiting adults who exhibited a wide range of observable participatory behaviors, from those who appeared to be engaged in facilitative play roles as well as those who appeared to be disengaged, as well as various genders and family roles. I also observed and interviewed eight children's museum staff members and volunteers based on availability and willingness to participate. There was no minimum amount of experience as a staff member or volunteer required to participate.

Observations

I observed adults in the children's museum as they were going about their routine activities—interacting with children and other adults, or performing essential museum duties. To quote the anthropological phrase “deep hanging out” (Rosaldo, as cited in Clifford, 1997, p. 188), I hung out in the museum enough so that my presence was a natural part of the environment. Phenomenological observation typically requires a researcher to be a participant-observer, taking part in as much of the natural activity as possible (van Manen, 1997). This method of close observation “involves an attitude of assuming a relation that is as close as possible while retaining a hermeneutic alertness to situations that allows us to constantly step back and reflect on the meaning of those situations” (van Manen, 1997, p. 69). I participated in the museum exhibits and activities as much as my role as researcher allowed, while maintaining enough professional distance to remain alert and reflective. Observations of children's museum staff and volunteers occurred on more than one occasion, while observations of visiting adults occurred only once on the day and time of their museum visit.

Field notes. During my time in the exhibits, I documented observations of the adult participants in the form of open-ended field notes. Acknowledging myself as the primary research tool, I relied on phenomenological description to illuminate and communicate the essence of the adult experience. According to van Manen (1997),

The term ‘essence’ may be understood as a linguistic construction, a description of a phenomenon. A good description that constitutes the essence of something is construed

so that the structure of a lived experience is revealed to us in such a fashion that we are now able to grasp the nature and significance of this experience in a hitherto unseen way. (p. 39)

The use of descriptive language begins to reveal the essence of the adult experience in the children's museum; however, my own observations and descriptions were not enough.

Observations only captured the concreteness of the experience, only what I as the researcher perceived. Interviews with adults were a necessary component in capturing the full essence of the adults' perceptions and experiences.

Interviews

In the spirit of hermeneutic phenomenological inquiry, I conducted individual interviews with participants. Following each observation, I asked each adult to consent verbally to a semi-structured, audiotaped interview. Each interview took place out in the open as part of typical activity and conversation at the children's museum, or inside offices in the case of staff members. According to van Manen (1997), the hermeneutic phenomenological interview process serves two purposes:

1. It may be used as a means for exploring and gathering experiential narrative material that may serve as a resource for developing a richer and deeper understanding of a human phenomenon, and
2. The interview may be used as a vehicle to develop a conversational relation with a partner (interviewee) about the meaning of an experience. (p. 66)

The initial data occasionally presented the need for additional or more probing questions in order to gain clarification or more information regarding the adult experience. I began the audiotaped interview with pre-formed interview questions, and interjected related questions that emerged as a natural part of conversation.

Visiting adults. Following the initial observations and collection of field notes, I approached the visiting adult, briefly explained the study's purpose, and obtained verbal consent for an interview. The interview consisted of questions similar to the following (see Appendix A):

1. What brought you to the children's museum today?
2. What is the child's age and your relationship to the child?
3. Are you a regular visitor to this children's museum or is this your first visit?
 - a. (First-time visitor): How did you prepare for your visit?
 - b. (Regular visitor): How do you prepare for your visits to the children's museum? How do these preparations change from visit to visit? Have you seen experiences that occur at the children's museum affect experiences outside of the children's museum? If so, can you give me an example or two?
4. How would you describe your role in your child's play here at the children's museum? How is this role different or the same than at home?
5. Do you play at the children's museum? If so, how?
6. How would you describe play?
7. Can you describe a vivid memory of childhood play?
8. Were there adults close by when you were playing as a child? What role did these adults have in your play?
9. What do you think you learned from the play you described?
10. One of the missions of the children's museum is to inspire curiosity to learn through play for a lifetime. Can you tell me what you think that means or give an example?
11. Can you describe similarities or differences between your play as a child and play here at the children's museum?
12. As an adult in the children's museum, what else can you tell me about your experience here?

Staff and volunteers. Audiotaped interviews with staff members and volunteers were conducted as availability allowed, and occurred at scheduled times separately from the observations. I obtained verbal consent for each interview. Questions were similar to the following, with follow-up questions interjected at appropriate times in the spirit of natural conversation and clarification (see Appendix B):

1. Tell me about how you ended up working/volunteering at the children's museum.
2. How long have you worked/volunteered at the children's museum?
3. Tell me about any kind of training/education in which you participated to prepare you for this work. What about ongoing professional development related to this work?
4. How would you describe your role in children's play here at the museum?
5. Do you play at the children's museum? If so, how?
6. How would you describe play?
7. Can you describe a vivid memory of childhood play?
8. Were there adults close by when you were playing as a child? What role did these adults have in your play?
9. What do you think you learned from the play you described?
10. One of the missions of the children's museum is to inspire curiosity to learn through play for a lifetime. Can you tell me what you think that means or give an example?
11. Can you describe similarities or differences between your play as a child and play here at the children's museum?
12. As an adult in the children's museum, what else can you tell me about your experience here?

According to van Manen (1997), the processes of gathering and analyzing hermeneutic phenomenological data are inseparable. While many times these processes are treated as separate acts, he advises that the hermeneutic interview "tends to turn the interviewees into participants or collaborators of the research project" (van Manen, 1997, p. 63). Reflecting with each participant

regarding his or her responses to the interview questions provided insight and illuminated themes that would have otherwise gone unconsidered. At the conclusion of each interview of visiting adults, staff, and volunteers, I asked participants if they were willing to take part in a follow-up interview and/or a protocol writing exercise. I collected the necessary contact information, such as name, phone number, and email address from the willing participants.

Follow-up interviews. As themes emerged during data collection and analysis, I occasionally found the need for follow-up information or clarification from participants. Participants who gave written consent indicating willingness to participate in follow-up interviews were contacted for these purposes. The follow-up interviews took place in-person at the children's museum or via email. The purpose of this second interview was to ask the participant to elaborate on a topic, or provide clarification on a particular issue. In-person follow-up interviews were also audiotaped and transcribed.

Protocol Writing

Language allows us to remember and reflect upon human experience, and is necessary for gaining access to experiences unique to each individual (van Manen, 1997). In an effort to capture the full essence of the experience, it makes sense that I would ask adults to write down their experiences and that their words would be valued as original text on which I as a researcher could work (van Manen, 1997). At the end of each interview, I provided each participant with the option to participate in a follow-up protocol writing exercise. Those who were willing to complete the exercise were asked for written consent, after which they received a packet with instructions for participating in the writing protocol. Several participants chose to take the protocol packet, and three returned the writing, either to the children's museum or in an email to me.

In the spirit of hermeneutic phenomenological inquiry, the question in the writing protocol was open-ended and designed to elicit a description of a lived experience. Following the suggestion by van Manen to encourage the participant to focus on a particular incident and

“describe the experience from the inside” (van Manen, 1997, p. 64), the main prompt was as follows (see Appendix C):

Recall a vivid memory of childhood play and describe the experience as you lived through it.

Once the writing exercise was returned, I contacted the participant for an additional brief interview and asked the following questions:

1. Why do you think this particular play experience stands out to you, or what does it mean to you?
2. Compare your memories about experiences of childhood play to your experiences of play at the children’s museum. What is similar? What is different?
3. How did it feel to write about your childhood play?

Analysis

I will begin to describe the process of data analysis in phenomenological research by describing what it is not. According to van Manen (1997), theme analysis is often reduced to a straightforward, mechanical process of counting frequencies or coding the text of a transcript into broken down bits. The formation of themes in this way is inadequate. An alternative to this simplistic method of analysis is to consider themes as “structures of experience” that describe lived experiences (van Manen, 1997, p. 79). True pedagogic reflection requires us to consider that “phenomenological themes are not objects or generalizations; metaphorically speaking they are more like knots in the webs of our experiences, around which certain lived experiences are spun and thus lived through as meaningful wholes” (van Manen, 1997, p. 90). Discovering the knots, or themes, in my study required careful reading and re-reading of all observational field notes, interview transcripts, and protocol writing. While first reading the text in its entirety, I asked myself, “What sententious phrase captures the fundamental meaning or main significance of the text as a whole?” (van Manen, 1997, p. 93). I also examined the text and considered, “What statement(s) or phrase(s) seem particularly essential or revealing about the phenomenon or

experience being described?” (van Manen, 1997, p. 93). I selected and highlighted these primary themes as they emerged. Through repeated readings of the data and the use of creative, hermeneutic memo writing, secondary themes also appeared. When multiple readings of the data revealed no new themes, I conducted one final reading to consider missing themes.

The work of Falk and Dierking (1992, 2000) as well as van Manen’s (1997) four existentials provided a structure for reflecting upon the data of the adults’ experiences. While each framework served as a lens through which to view aspects of the museum experience, I was careful not to let them limit my thinking as I considered themes. To be true to the hermeneutic phenomenological research methodology, it was important to let the themes emerge naturally, regardless of the framework. Once themes had emerged, I then considered how each theme fit the structure of the frameworks that I used to guide my study.

Ethical Considerations

Ethical considerations are the essence of a qualitative study, and taking precautions to preserve the integrity of the research process enhances the work (Erlandson, Harris, Skipper, & Allen, 1993). Ethical concerns for participants have helped to shape my study from its inception. At the forefront of all research methods is my respect for the institution of the children’s museum and the individuals it serves. The paramount ethical consideration in research is to do no harm to participants: therefore my study posed no physical or psychological risks. I was honest and forthcoming with participants about the study’s intent and I have committed to sharing the final report in a way that will be informative to those who allowed me in the children’s museum space. I discuss informed consent, privacy and confidentiality, respect of environment, and personal bias in the following section.

Informed Consent

I obtained permission for this study from the museum’s director and governing body (see Appendix D), as well as my university’s *Institutional Review Board* (see Appendix E). According to my university’s IRB, observations of adults or children conducted in the public space of the

children's museum required no informed consent. While I acknowledge that children were present in the museum interacting with the adults under study, my research did not involve the children and presented no risk to them. After my initial observation, I approached the potential adult participant with a prepared *Recruiting Script* (see Appendix F) and *Participant Information Sheet* and *Adult Consent Form* (see Appendix G). At this time I asked for verbal consent for an interview. Once verbal consent was obtained, I proceeded with the interview. I informed each participant that he or she could refuse to answer any interview question or opt out of the research process at any time without negative consequences. At the conclusion of each interview, I presented the participant with the option for a follow-up interview and/or protocol writing, and used the adult consent form to obtain informed consent.

Privacy and Confidentiality

A notice at the front desk informed participants that research was being conducted in the museum (see Appendix H). All potential research participants had the option to inform the staff at the front desk if they wished to not be included in observations or approached for an interview, who then informed me. I honored all requests to be excluded from research. I ensured the anonymity of participants by coding field notes, interview audio files, and transcripts with a number that corresponded to each adult consent form. All written documentation and reports referred to participants with non-identifying pseudonyms. I stored consent forms with personal contact information separately from any data gathered in a locked file cabinet and/or digital dropbox with a secure password.

Respect of Environment

As the primary research instrument, I am aware that my presence in the children's museum environment may have affected the interactions that would have naturally transpired. While it was an ethical obligation to pedagogical thoughtfulness to complete this study with as little intrusiveness to museum interactions as possible, it was also imperative that I not be separate from the "human interaction that is the heart of the research" (Erlandson et al., 1993, p.

15). I attempted to find the delicate balance between observer and participant, while being cognizant of not interrupting the natural pedagogy between the adults in the museum and the children in their charge.

Limitations

Researcher bias is always a consideration as a limitation due to the subjectivity in phenomenological studies. Qualitative research is not value free (Denzin & Lincoln, 1994). I concede that my theoretical or philosophical stances frame, and in some cases bias my understandings of phenomena. It is possible that my ontological or epistemological views and my own experiences of childhood play colored the lenses through which I viewed the participants. As a qualitative researcher, I will not attempt to pretend that my observations and interpretations are free from possible bias.

I will also concede that my presence in the children's museum may have altered the interactions that would have naturally occurred between adults and children. It is possible that participants may have responded with answers they thought I wanted to hear, rather than more truthful answers that may have revealed information they did not want to share.

Trustworthiness

I acknowledge that "human science operates with its own criteria for precision, exactness, and rigor" (van Manen, 1997, p. 17). Trustworthiness is equal to credibility in the field of qualitative research (Erlandson et al., 1993). I utilized a variety of techniques to establish trustworthiness, including prolonged engagement in the field, purposive sampling, persistent observation, member checking, reflexive journaling, and leaving an audit trail (Erlandson et al., 1993). Significant time spent at the children's museum allowed me to develop relationships with staff members and volunteers. Purposive sampling of participants ensured a variety of museum behaviors, which resulted in a more accurate depiction of the clientele of the children's museum. I worked to develop a trusting relationship with participants by developing rapport before and during each interview. I conducted informal member checks during and at the end of each

interview by asking clarifying questions and summarizing main points, while being mindful to obtain in-depth and accurate data. I worked to provide confirmability of the data, providing for the audit trail each data piece tracked to its source. I also used peer consultation as a technique to provide confirmability of themes.

In keeping with van Manen's (1997) notion that "hermeneutic phenomenology is fundamentally a writing activity" I wrote in a reflexive journal to document decisions made during the research process (p. 7). These journal entries included analytical memos regarding museum visits, conversations with participants, and data analysis, all of which has become archived as part of the audit trail. Finally, I recognize that it is "naïve rationalism that believes the phenomena of life can be made intellectually crystal clear or theoretically perfectly transparent" but will strive for "precision and exactness by aiming for interpretive descriptions that exact fullness and completeness of detail" (van Manen, 1997, p. 17). While I cannot ever expect to perfectly convey the true essence of the participants' experiences, I have worked to be as transparent as possible with the process of coming to the stories that are portrayed in this work.

Final Thoughts Regarding Methodology

I consider this hermeneutic phenomenological research of adult play in a children's museum an act of pedagogic responsibility. "A hermeneutic ability to make interpretive sense of the phenomena of the lifeworld" is necessary to see the "pedagogic significance of situations and relations of living with children" (van Manen, 1997, p. 2). If the current work and mission of children's museums are to contribute to the greater child-saving movement, we must better understand how to help adults have positive pedagogic relationships with the children in their lives; this begins by understanding the experiences of adults who work and play there.

CHAPTER IV

FINDINGS

We don't stop playing because we grow old; we grow old because we stop playing.

— George Bernard Shaw

The purpose of this study was to explore and describe the *whatness* of the adult play experience in a children's museum: the nuances of adults' views of the meaning of play, their perceptions of the adult role in children's play, and their behaviors while in the museum. Engaging a methodological approach of hermeneutic phenomenology, I collected data from observations, interviews, and protocol writings from adults who work, play, volunteer, or accompany children to the museum.

Participants and Data Collection

I conducted observations and interviews of 17 adults: two full-time staff members, three part-time staff members, three volunteers, and nine visitors. I observed at the children's museum on ten separate occasions totaling approximately 21 hours over a period of four months—December 2017 through March 2018. I observed on each day of the week when the museum was open, and once during a special event when the museum was closed to the general public. Varying times and days of observations gave me the opportunity to witness an assortment of activities with various populations of visitors. I watched story-time with toddlers, singing and

dancing in the theater, and birthday parties. I witnessed arts and crafts, medical center dramas, pretend fishing and cow milking. I was there on days with few visitors, and I was in attendance when a school holiday and one-dollar admission resulted in 538 children with their parents, grandparents, or other caregivers. I also attended a special event in the evening for families learning English as a second language.

I compiled open-ended field notes from observations and interviews into a journal, which I kept near me at all times. My interviews with participants clarified observations and illuminated additional aspects of the adult experience that I could not observe. I transcribed these audiotaped interviews immediately, coded them with numbers and pseudonyms that corresponded to field notes, and placed them into digital data sheets where they could be analyzed for codes and themes. I received protocol writings from three participants—two staff members and one visitor who had also been a volunteer—which I typed and placed into digital documents for analysis.

Data Analysis Process

I grouped observational field notes, interview data, and protocol writing into subsets for each of the participant groups: visiting adults, volunteers, and museum staff members, both part-time and full-time. I performed an analysis of each subset of data before moving on to the next. Following van Manen's (1997) and Vagle's (2014) advice for phenomenological analysis of data, I read through the data from each participant at least twice before finally making notes about the meaning of the text. This initial stage of a "whole-part-whole" method of analysis allowed me to reacquaint myself with the data and consider each participant's perspective as a whole (Vagle, 2014, p. 98). After writing initial thoughts related to each whole data set, I performed a "line-by-line" reading, taking care to make notes and mark text that appeared especially meaningful or relevant to the research questions or framework (Vagle, 2014, p. 98). I also occasionally wrote entries in my journal in order to expound on thoughts I was having during these readings. In order to preserve the voices of participants, I made note of both short phrases and larger chunks of participant language from the interview transcripts that seemed to be especially meaningful in

describing unique perspectives of the museum experience. This approach is similar to what Saldaña (2016) describes as “In Vivo coding” (p. 105). Saldaña (2016) suggests *In Vivo* coding as an approach that honors the voices of participants as interpretations are made regarding the personal meaning of lived experiences. Once I made note of relevant participant language, these chunks of text were placed onto separate index cards and sorted into categories related to interview questions and research framework, as well as any other themes that began to emerge. Each card was color coded by participant subsets, so that data from visiting adults, volunteers, and staff members could be viewed and sorted individually if deemed necessary.

Next, I performed at least two more readings of the data, this time marking the text with *Concept* and *Values* codes, both of which are coding strategies recommended by Saldaña (2016) for phenomenological studies. Concept coding is an analytical approach that assigns deeper meaning to a chunk of text. For instance, when a museum volunteer reflected on playing pick-up soccer with his childhood friends in India with the comment, “Things are pretty simple when you’re a kid,” I marked that block of text with the code *nostalgia*. I wrote concept codes on index cards, which became topics for analytic memo writing. The following is a memo that I wrote about nostalgia:

I find it interesting that a person as young as Manish would reflect about the worry-free days of childhood! To me, he seems like such a child himself! I thought only old people like me did that! It actually made me sad for a moment—to think that someone so young already laments the past. It also makes me wonder—do we glorify the past so much that we forget to actually be in the present? I know there is work regarding memories and how we sometimes alter them to fit a narrative we create about ourselves. Have I done that with my own play memories? Are they an accurate representation of the way my childhood play really was? When Manish talked about soccer with his friends—it was more the *way* he spoke than his actual words. I saw the flicker in his eyes when he spoke of “kicking the ball around in the mud.” This matches with what I know about place being significant to memory. I wished I had asked him what he was seeing in his mind at that moment.

I saved the analytic memos in my journal as extended reflections and pulled them out as they became relevant in subsequent work.

Values codes reflect a participant's perspective or worldview—their values, attitudes, or beliefs regarding a particular phenomenon (Saldaña, 2016). According to Saldaña (2016), values codes which are consistent across multiple sources of data increase trustworthiness of research. I found the values codes to be particularly helpful when comparing participants' words with my observational field notes of their actions. For instance, when a visitor spoke of the amazing creativity her grandchildren exhibited at the museum when “allowing them to do it themselves” I marked that block of text with the code *child-centered*, which was consistent with what I had noted about her interactions with them in the art station. This was helpful when attributing certain play roles to adults during analysis. I wrote values codes on index cards and sorted them into categories in an attempt to generate concepts of broader meaning. For instance, the values codes *endless possibilities*, *freedom of choice*, *play inspires careers*, and *pursuing interests* all became a more global code of *individuality*.

I considered all codes and memos as I conducted subsequent readings of the data as whole sets once again, looking for what van Manen (1997) would call themes—knots in the webs of participant experiences. I made continuous notes, both digital and in my journal, to process my thoughts regarding themes, research questions, research framework, and broader implications of the study. Final readings of the field notes, interview transcripts, and protocol writings included consideration of data pieces that might be missing from currently identified themes, as well as possible missing themes.

The Essence of the Space

Before I begin the narrative description of the experiences of individual adults in the children's museum, I find it necessary to give some background information regarding this particular museum, as well as a detailed description of its physical space, its mission, and the people who make up the museum community. It is important to note that the establishment of this particular children's museum was the product of hard work and a decade long dream of a small group of child advocates who wanted to create a playful, educational environment for children,

many of whom are still involved with the museum in one capacity or another. The children's museum itself is more than a building with exhibits—it is a living entity made up of the people who imagined and built it, and those who currently work and play there. Its space and its people contribute to the experience.

The children's museum humbly began as a nonprofit institution in 2001, and through the fundraising efforts of its founders and community supporters it became a mobile museum in 2006. This museum without walls provided portable exhibits that traveled to classrooms and engaged over 16,000 children and their teachers in hands-on activities and free resources. In October of 2011, the dream of a physical building became a reality, and the children's museum made its grand opening. As it currently stands in 2018, the approximately 10,000 square foot building contains 15-17 interactive exhibits on a regular basis. The main museum floor holds most of these exhibits, which are separated into areas in an open concept format. Opportunities for several types of play are present in the exhibits, offering visitors chances to engage in the creative arts, scientific and mathematical constructions, and large-motor physical play. Those interested in the visual or performing arts might visit the fully-stocked art area to explore and create with a variety of readily accessible artistic media, or perform a show in the theater, complete with costumes and supplies for writing scripts and creating playbills for an audience. Visitors may interact with authentic clothing, books, and toys from a sister city in Japan, go on a safari in the indoor forest playground, or role-play a medical drama in the museum's neonatal unit or surgery center. Other opportunities for acting in make-believe scenarios include an early 20th century store and farm where children can shop for groceries, check out customers with an antique cash register, or milk a life-size pretend cow. It is not unusual to see role-playing occur in the construction play exhibits as well. Large foam building blocks provide opportunities for the creation of houses and forts; smaller wooden blocks become habitats for plastic dinosaur families. Opportunities for scientific thinking abound in exhibits where visitors can play with manipulative building kits, reposition magnetic tracks on a gravity wall, or explore mazes of transparent

airways that carry scarves and balls. The indoor play structure and rock wall encourage large motor and risk-taking play as older children climb and slide, while toddlers enjoy the special room equipped with age-appropriate sensory and climbing toys designed specifically for them. Two classroom areas contain rotating exhibits or become space for birthday parties and other special activities. A few small offices, a staff room, and storage room are sprinkled around the perimeter, but are mostly behind doors and out of sight of the main area.

Mission and Philosophy: Learning through Play for All Ages

The children's museum is currently a private, nonprofit organization and is a member of its state's museum association, as well as the greater Association of Children's Museums. A play-based philosophy is not only apparent in the museum's exhibits, but is also evidenced throughout its promotional and informational materials. According to the museum's website (2018), its belief is *inspiring curiosity to learn through play for a lifetime* with a mission to *engage children and adults in inquiry-based exploration, creativity and learning through play*. While play is not overtly defined, it is positioned as essential for children's overall well-being, development and learning. The website offers a philosophical statement that *play is the most inclusive and efficient form of learning humanity has ever devised*. A page devoted to the importance of play briefly explains play's connection to healthy development of fine and gross motor, socioemotional, and problem-solving skills. Each exhibit has its own page on the website—also accessible by smart phone through QR codes posted in each area—devoted to educating visitors of its purpose and connection to learning. Along with a description of each exhibit which explains the type of play to expect there, a paragraph titled *Education Points* explains the learning potential of engaging in play in that area. A *Ways to Play* section offers suggestions to adults who may question how to engage with children at the exhibit in ways that promote positive interactions and learning through play.

The children's museum's website clearly communicates the philosophy that people of all ages can learn through playful experiences. Informational materials advocate for play as a

benefit—not only for children’s developing minds, but for the adult brain as well. The museum’s vision statement mentions *first-and-forever learning*, which is also a term that is frequently spoken by staff members. It continues to be a consistent message as the museum targets not only children as its audience, but entire families through its exhibits and outreach activities.

Community Outreach

The children’s museum and the local community have a reciprocal relationship, which is evident in the volunteerism and service learning activities that are carried out inside and beyond the museum. Its *Without Walls* initiative extends traveling exhibits involving literacy, science, math, history, and music to schools and libraries around the state. Partnerships with local and state organizations support these programs, as well as help to fund field trips for school groups to visit the museum. Local elementary schools are encouraged to bring classes through sponsorships or reduced prices, and free educator kits complete with videos, exhibit guides, and resources related to learning through play are given to those teachers who request them.

A robust relationship with the nearby university is evident by the many volunteers and work study students who are present weekly in the museum. Both university instructors and students contribute to special exploration activities for learners of all ages in writing, math, and science several times per week. Local organizations, businesses, and school groups participate in cleaning the museum, sorting donations, and preparing items for exhibits, as well as sponsoring special events for unique or underserved populations in the community. Days with reduced-price admission along with donated food items benefit the local school district’s weekend food sack program, which serves children who have been identified as needing supplemental food sources. Scholarships for family day passes, free admission for children in foster care, English Language Learner family nights, and monthly autism support groups are other examples of the museum’s outreach to the children and families of the community.

The children’s museum also reaches out to the most senior residents of the community. A recent initiative includes partnerships with local retirement villages, as well as residents of a

government subsidized housing community. Outreach programs taken to these facilities offer the residents—and sometimes visiting grandchildren—opportunities to engage in creative art and construction activities that stimulate brains with an emphasis on the process of play. Additionally, some residents participate once a month in on-site museum activities, such as assisting with programming or interacting with children on the museum floor.

Parents as Partners

The children's museum has established itself in the community as a family friendly institution. Its website communicates its position as a resource for families, while honoring parents and caregivers as the *first and most important teachers for children*. This philosophy is palpable within the museum, as it is not uncommon to see more than one generation of adults attend with the children in their families. The museum offers special exhibitions and events aimed specifically at attracting visitors of all ages. Toddler story-time led by the museum's early childhood specialist serves as an enriching activity for the youngest patrons, as well as providing a support network and social outlet for the parents and caregivers who bring their tiny tots. While this weekly event often attracts first-time visitors, there is a steady following of mothers who bring their toddlers each week. The adults enjoy the stories, interactive songs, and finger plays with their children as they also make much-needed connections with one another. Older children and adults join in the song and dance time that follows in the theater area. Visitors of all ages and backgrounds can be seen singing and dancing together on and around the stage. Both children and adults enjoy the various special events that involve creative writing, arts and crafts, petting live animals, or building with power tools. Families may also participate in after-hours activities that provide resources and learning activities that target specific needs. Once each month, families who are learning English as their second language interact with volunteers at each exhibit and participate in activities designed to support their learning. Similarly, parents of children on the autism spectrum may participate in regularly occurring museum-sponsored evenings designed

specifically for families with special needs, complete with child care and parent support group meetings.

The Museum Staff and Volunteers

The children's museum employs three full-time staff members, which include an executive director, an operations manager and volunteer coordinator, as well as a programming and outreach specialist. Additionally, the museum employs 23 part-time staff members who assist with the various operational and programming responsibilities at the museum. The part-time staff members include 13 students from the local university who are supported by federal work-study funds.

Local volunteers are vital to the museum's success. Volunteers may serve on limited occasion or may set up regular occurring shifts to assist behind the scenes or on the museum floor. According to the director, the museum logged 411 volunteers in 2017, representing student groups from the local high school and university, employees from local businesses, as well as individuals from the community who were interested in serving the museum's mission. The 3,000 plus hours of volunteer work amounted to a dollar equivalent of over \$70,000.00.

The Museum Visitors

The children's museum logged just under 44,000 admissions in 2017. Similar to previous years, approximately 80% of visitors entered with museum memberships or paid at the door, while the remaining 20% were given free entry through various outreach programs or scholarships. Many of the visitors live locally in the community, but the museum also attracts families and groups of children from small towns and cities across the state.

Data and Themes

I identified three essential themes unique to the experiences of adults at the children's museum: (1) Adults view the children's museum as a space that fosters individuality, (2) Adults view the children's museum as a space that fosters positive social interactions, and (3) Adults view the children's museum as a safe space to play and learn.

In the following sections, I present the data as it is related to each of my research questions. Elements of the themes of children's museums supporting development of individuality, fostering positive social interactions, and serving as safe spaces to play and learn will be evident throughout the descriptions of conversations with participants, with a more thorough discussion of each theme in the final segment.

Entering the Museum

During my many visits to the children's museum, I have formed my own perception of the space. As I drive into the parking lot each time, my initial thought is that there is a stark contrast between the outside and inside of the building. The fairly plain exterior of the rectangular brick building appears much like any other building in the less developed area of the city, except for the brightly painted windows which hint to the special nature of the inside. The ordinary outdoor appearance gives way to an unquestionably captivating and cheerful interior atmosphere. Just inside the front reception and small gift shop area filled with exploratory and educational toys lies the main museum floor. Once through the doors that separate the reception area from the rest of the museum, visitors are greeted with the bright colors of exhibits and children's artwork which hangs on the walls and from the ceiling. There are often sounds of splashing from the water table and sirens from the medical center's ambulance, as well as the low and steady hum of the airways exhibit, usually present under the shrieks of surprise from the young children chasing the scarves and balls that fly out of its clear tubes. The open floor plan and lack of interior walls allows one to see across the museum floor at a glance, which may serve parents well as they attempt to visually keep track of their children (see Figure 5).

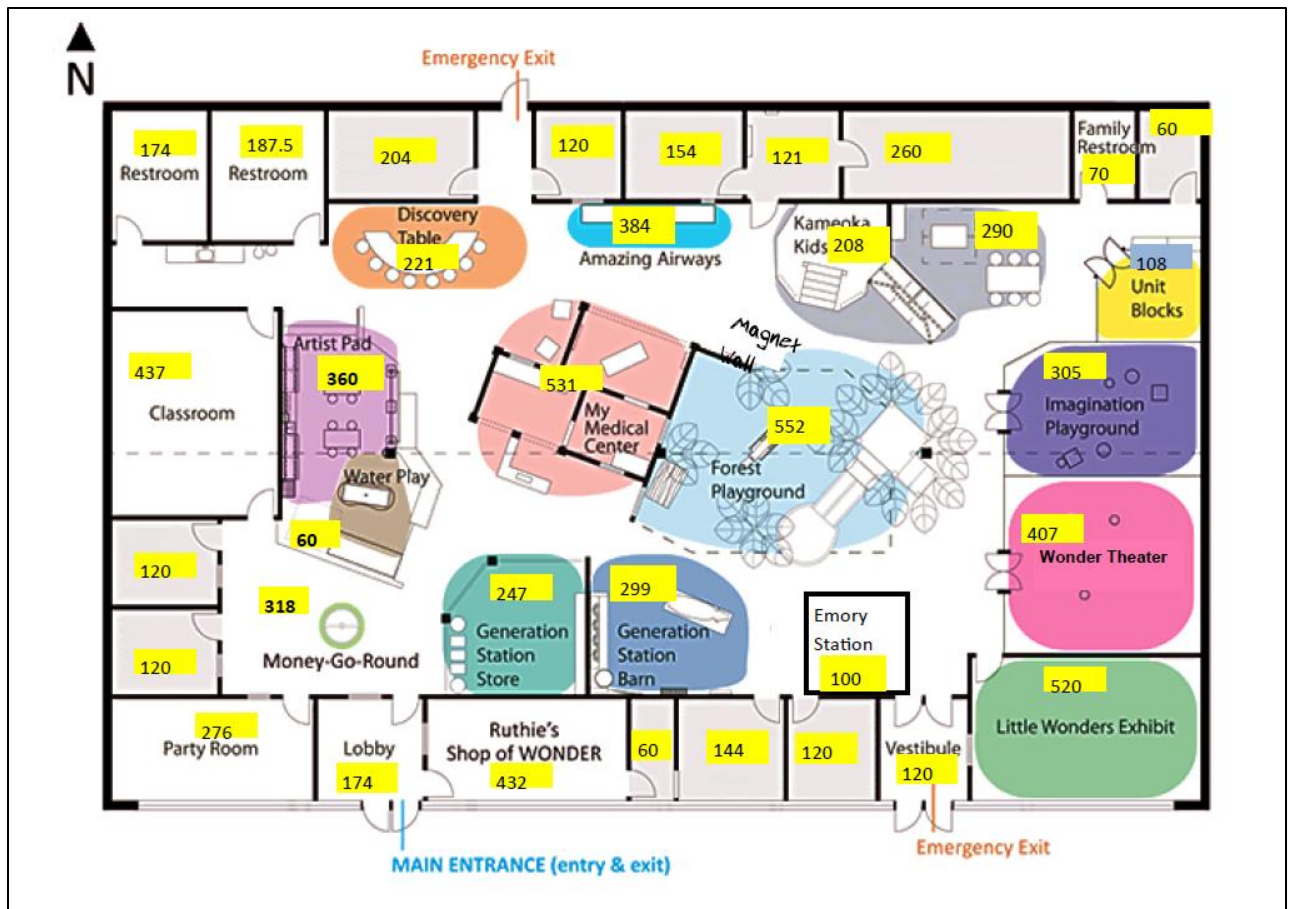


Figure 5. Children's Museum Map with Square Footage.

This unique spatial design and openness of exhibit areas encourages overlap of the themed concepts, enabling props used in dramatic play to flow seamlessly from one exhibit to another. A baby from the neonatal unit may be found with its child friend on a climbing structure, or a child wearing a safari costume may be milking the pretend cow in the barnyard area. A child role-playing in a wheelchair from the medical center may be found performing on the theater's stage. While the main features of most exhibits are fairly static, some features or props change on a regular basis, based on conceptual or seasonal themes. During the most recent winter months, children pretended to ice-skate in socks on a slippery floor, snowy art activities were featured in the art area, and props related to winter activities were placed next to the theater's stage. The

spring season brought science activities related to wind and weather, paper airplane engineering, and a host of *under-the-rainbow* whimsical spring break activities. The outward appearance of the environment is that it is impeccably well maintained—before, during, and after hours. The exhibits are always immaculately clean, and there is usually a sense of order even during the height of its busiest days.

Research Question One: Adults' Experiences of Play

I observed and conversed with 17 adults in the children's museum, all of whom were either visiting with children or working there in some capacity. Each of them had unique motivations, intentions, and perceptions of their experiences there. In order to bring attention to the unique perspectives and differences among individuals that may be in a children's museum at any given time, I have chosen to highlight seven of these adults: three visitors, two volunteers, one part-time and one full-time staff member. Each of these adults are representative of one of the many perspectives that may exist in each of these categories.

Visitors. The following vignettes will introduce you to three visitors: Linda—grandmother and occasional volunteer, Kim, and Amena—both mothers.

Linda. I first observed Linda in the art area on one-dollar admission day. The museum had one of its highest numbers of visitors that day, and people were milling about everywhere. Although the space was somewhat loud and crowded, Linda was sitting at a table with several children, intently focused on an art project. She chatted with the children as she worked, clearly enjoying her time helping them, as well as working on her own project. Having not yet decided who to approach for an interview, I passed by her and walked around the museum. I saw her again later standing near the medical center holding some children's jackets. We made eye contact and smiled at each other. When I asked her for an interview, she happily agreed. She explained that she was “keeping an eye” on her three grandchildren—ages eight, seven, and six years—who had a day off for the Martin Luther King, Jr. school holiday in a nearby town. The children belonged to her son who was working that day, and she was excited to “get to play with

them.” She believed that coming to the museum was much better than being cooped up inside on a cold day. She made it clear that she felt the children learned when they played at the museum. “I don’t like ‘em to spend a lot of time in front of the TV,” she said. “Any time they are learning is better. So any electronic is a minus and any time they’re learning is a plus. That’s how I see it.” She cared for the children every other weekend, and they were regular visitors to the museum. Linda had also volunteered at the museum occasionally, she said, and she had been telling the children about the new train exhibit that she knew they had not yet seen. The children had also spent their time in the car on the way to the museum planning what they would do when they got there, because they all had their favorite areas. She said that her grandson always visited the block area, and her granddaughters were fond of the babies in the medical center. “And the crafts,” she said. “They ALL like the crafts!” I mentioned that I had seen her working on a project and she smiled and said, “We spend a lot of time over there at the crafts.” She said that crafts were also something that she enjoyed with the children at home. Linda made it clear that spending time together was something they did on a regular basis, and she was thoughtful about the experiences that she provided for them. At one point during our conversation, her grandson asked her if he could play with some new friends in another area. Linda became a bit agitated when she glanced around and could not locate her granddaughters right away. “They vanquished!” her grandson said. I giggled at his precocious misuse of vocabulary. In a moment, they appeared on top of the pretend mountain. “There they are!” he said. “Can I go play? They’re just over there [new friends].” Linda hesitated, and responded, “Okay. I’ll follow you.” She explained that she had known the museum would be busy because of the school holiday and the reduced admission price. She had made the children promise to stay together. “I told ‘em that we had to stay together—we couldn’t split up. We did make that deal.” As we visited further, she talked about her role in her grandchildren’s play. “I like to help educate them...we play, too! We spend a lot of time at the splash pad, and at the parks.” When I asked her what that looked like, she said, “I try to be a child, too, I guess. I try to help them learn. Teach them, laugh with them, smile with

them.” She recalled her own childhood play experiences while growing up in the country and playing with her animals. “We had pigs, we had chickens, we had—you name it, we had it!” She also remembered turning chores into play. “We had a lot of animals and we had chores. That’s missing from them,” she said. “I try to make up for that in other ways.” Linda described play as bringing “joy to her heart.” She spoke of enjoying her time as a volunteer in the museum, because it allowed her the opportunity to play with kids even when her grandchildren weren’t with her. Her eyes sparkled when she recalled interacting with two children who used the big foam blocks to build a structure around themselves. “They did that themselves! The imagination here is just endless possibilities. That station over there [surgery center] where they put the body together? I mean it’s amazing just allowing the children to do it themselves.” She also spoke of the stories that children would sometimes tell her, which prompted me to ask her if she spoke with children often as a volunteer. Linda responded, “They talk to me and I listen.”

Kim. Kim was also present in the museum on one-dollar admission day. When I noticed her, I was specifically looking for someone who seemed uninvolved. The museum has very little seating, which I suspect is a purposeful design decision to discourage adults from disengaging; however, Kim had found a seat on a bench between the art area and medical center. I checked on her several times during a 15 minute span, and I hardly ever saw her look up from her cell phone. In fact, I had no idea which kids even belonged to her until I saw a couple of children speak to her as they passed by. Other than a couple of brief interactions, I never saw her engage with anyone. She did agree to an interview when I approached her, but it was difficult to engage her in conversation. Her answers to my questions were very short, and she didn’t elaborate much when I prompted her. Kim had brought her two children who were eight and ten years old. She worked in a school, she said, and this was her one day off. They had come to the museum before, but were not regular visitors. When I asked her about her role in her children’s play, she responded with “I don’t know. My kids seem a little bit too old [for the exhibits].” She described play as “having a good time,” and she expressed that even though it was a busier day than usual, she felt things had

gone “really, really well.” She did express her opinion that the museum offered opportunities for her children to learn how to get along with others, problem solve, and be creative. “Not just sit in front of the TV like a lot of kids do.”

Amena. I met Amena on a Tuesday afternoon. She had brought her young toddler son to play while her older daughter attended a class at a nearby art studio. She was standing in the large motor play area watching him as he played inside the climbing structure. He was giggling and peeking through the mesh enclosure at her as she was smiling back at him. Amena explained that she and her family held a museum membership and came there often. She said that even though her son was very young, there was much he was able to enjoy there. “He likes the slide, he likes the water station, puzzles, or the airways,” she said. Anything that moves!” I asked her about her role in his play. She laughed as she said, “I often observe. But when it comes to the train station, I play with him.” I asked her to elaborate about when she observed and when she played. “I just want to observe because [I] am tired at home taking care of him. And the reason why I will join him is [be]cause here I want to show him, like how he can make train railroads, or if I think he needs my help, I just show him how. For example, the other day I showed him how he can open the door to take the trains out.” Amena discussed her evolution as a visitor over the course of the two years she had been coming to the museum with both of her children. “In the beginning I was just watching,” she said, “and I started to get involved, and be a kid.” She further reflected, “Maybe it’s my second child, and I was different [then].” She expressed that she is less hesitant now to be playful herself. “I usually go to the diner area over there, and I’m very active in the water station,” she said laughingly, “and here,” as she motioned to the train set. “Now I try to enjoy the moment.”

She expressed her appreciation for the opportunities the children’s museum provided that were not available at her home. “Here it is a lot easier. There is more space—more options. As long as he feels safe, then I trust.” Amena described play as “being in the moment.” She spoke of her own memories of childhood play in Switzerland. One of eight children in her family, she

remembered spending many hours outdoors engaged in pretend play. When I asked her if adults were involved in her play, she laughingly said, “No, because we were eight. It was very safe where we played, so there were no worries.” She responded without hesitation when I inquired about learning through childhood play. “What did I learn? Just to enjoy time.”

Volunteers. I will also introduce two volunteers, both of whom were students representing their university’s writing center during a special event.

Laila and Manish. I met Laila and Manish during an evening event designed for children and families who were English Language Learners (ELL). Both were representing the writing center from the local university, and this was their second semester of volunteering for the ELL events. The event was open to the students from the local school district who had been identified as qualifying for ELL services, and this evening at the museum was just one in a series of experiences crafted to bring families together and provide resources to meet their needs. Both Laila and Manish volunteered at events held at the public elementary school, as well as the once-per-month evenings at the museum. During a portion of the evening, a special language class was held for the adults while the children played. Although the children were free to choose play in any of the museum areas, they were given a special museum map with specific stations to visit. Each station on the map had a blank spot that would hold a sticker when the task was completed in that area. In each station was located at least one volunteer who would talk and play with the children in ways that encouraged them to use language. I watched Laila and Manish interact with a young girl who was building a barn in the unit-block station. They laughed and chatted as she happily worked. An adult male who appeared to be the little girl’s father sat on a bench close by, occasionally smiling and taking pictures. I watched them interact from a distance, not wanting to intrude on the little girl’s time. After at least 20 minutes in the area, I overheard them encourage her to visit some of the other stations, as they were nearing the end of the event and she still had several stations on her map yet to visit. She clearly had enjoyed her time with them and was hesitant to leave. Manish placed the sticker on her map and she very sweetly told them both,

“Thank you!” I sat down with both Manish and Laila and discussed their experience. When I asked them about their role in children’s play at the museum, Manish immediately responded with, “I mean one word, and that would be fun! Like you saw here, children can be pretty creative and there are some things that even you don’t think of that they come up with. And then when you praise them for that and they get really happy, that kind of makes us happy, too!” Laila agreed and added, “I guess kind of like a facilitator.” She described play as “meaningful fun.” She elaborated by saying she believed that the children’s museum offered a purpose for children’s play, for instance the learning that could happen with building with unit blocks. Manish added, “There’s so much you can do with simple blocks. Each person imagines things differently and so you are not restricting them to like—cogwheels—like this is how it should be done.” He went on to describe play as “free reign.” When I asked about learning through play, he reflected upon his experiences playing soccer as a child. “You know, you kind of get disappointed a lot when you’re a kid because things don’t go as you planned them to be. So that’s a good thing to learn when you’re a kid.” Laila talked about her own play as a child and learning to ride her bike. “I felt accomplished because I finally got my training wheels off!” She laughingly remembered how her parents had held her bike from behind, and then let go without telling her. “That’s the biggest test!” Manish laughed. “Yeah, it’s a trust,” Laila agreed. They both expressed recognition of the value in what they perceived as open-ended tasks at the children’s museum and their role in facilitating children’s individual interests. Laila talked about that evening’s task in the unit-block station. “Like, you are restricted to [building] the barn, but you have the opportunity to build it however you want, so that’s kind of open-ended in that it gives them the chance to engage in their own mindful thinking of how to do that.” In regard to the museum’s mission of inspiring lifelong learning through play, Manish mentioned, “The museum is definitely a place where kids can come in and learn new things, and like she [Laila] said, open-ended tasks. Like the theater there where they can dress up, act up a play or something like that. That kind of gives them, probably confidence, I would say?” He also speculated that play at the museum could inspire future

careers. “Who knows like somebody who is an actor here, would grow up and become an actor,” he said, and then referred to the unit blocks, “or the humble beginnings of a civil engineer.” Laila mentioned the museum’s influence in her own career aspirations. “I was going to be a speech pathologist and I knew I wanted to work with kids—and then I switched for my master’s [degree]. But coming here always reminds me of my initial goal, which was to work with kids.” She laughed, “It sometimes makes me doubt what I want to do now!”

Staff members. The following vignettes describe my interactions with two staff members: Liam and Jo.

Part-time staff member: Liam. Liam was playing at the magnet wall by himself the first time I saw him. He was clearly working on his own construction of tubes and balls, stopping occasionally to make a silly face or toss a ball to a child who happened to stop to watch him. Observant of his surroundings and a self-described “people person” I later found out, he noticed me watching him and sauntered over to introduce himself. We sat down on a bench next to the theater area and he told me the story of how he became a part-time staff member. “I had a freshman orientation project that I had to do, and I was going through, scrolling and stuff for good places to volunteer. I had to get like four hours and all of a sudden I looked up and it said the children’s museum is a great place to volunteer and I was like, ‘Okay—you know I could do that.’ I love working with kids and it caught my eye big time.” After serving his four hours of volunteer time, Liam became a part-time staff member through the work-study program at the university. He described himself as an extrovert. He felt his love for working with kids had been nurtured by his mother who had been a teacher all his life. He had spent many hours in her classroom, as well as tutoring kids and working at summer camps. He had only been working at the museum for one month, but already felt at home. “It’s awesome. It’s just like a whole little family organization. No one tries to yell at each other or tell each other what to do. You know, it’s really chill—laid back.” I asked Liam about his interactions with kids, his thoughts of play, and its relationship to learning. He had a lot to say. “You know, I work and I get paid and stuff

like that, but like, it's really not about me. It's about all the little kids around here. For example the other day this girl was building with these big, huge blue blocks over here and I walked over. And you know she was kind of having a little trouble and I was like, 'You know, let's do it together.' So we built this huge little nice house and she got in it, and she about took a nap in there!" He laughed, and said, "It's just being able to adapt to kids. You know—being able to talk to them and interact. It's easy." Liam explained his process for deciding which kids to approach. "If they have a pal with them, then you know usually kids are great with that. But when they're alone is usually when I approach them. If I see them being alone or if I see them getting bored or kind of sitting around, I'll be like, 'Hey, let's go do something!' And you know, they're always up to go do something." He also had a no-fail strategy for inviting kids to engage in make-believe scenarios in the medical center. "When I can tell they're trying to role-play but they don't have anyone to role-play with, I'm like, 'Hey! My wrist isn't feeling too good.' I've laid on that table and they've checked me. I've had 'em write down stuff and then they'll wrap [my wrist]. Liam described play as "having a smile on your face." He also felt that to play meant to be worry-free. "If you're playing, you're not worried about anything, you know." He reflected about the absence of reality in play. "A lot of reality is kind of negative. When you're playing, you're having a good time—being in the place that you are at the time."

Like for example, I was really playing over there [magnet wall]. Honestly. And like, I was learning. You know, you're learning when you're playing. And time goes by a lot faster when you're playing." Liam had many good memories of play as a child in his "big red barn" and remembered climbing the "bird pole," which was a tall pole on which a bird house was perched. He could apparently shimmy all the way up to the top, and it had been his routine to watch his dad come home from work each day from its highest point. He climbed the pole so much that he remembered often having blisters on the tops of his feet from sliding down. He wistfully described his "perfect little family" and his memories of time spent with his father painting a basketball court in the barn, learning to ride a bike, and then to drive. "That place has like the

most memories,” he said. “So many memories on that farm.” His tone changed a bit when he talked about leaving it all behind. “I didn’t realize how amazing it was until we moved into a trailer park. And I was like, wow, this is not—you know, it was just crazy.” I chose not to ask Liam what had happened in his life to cause this change, but his reference to his father in the past tense made me wonder if he had not only lost his home he remembered so fondly, but also one of the most important people in his life at a young age. “I learned so much stuff out there just because of him—just because he was a willing dad and able to spend time with me. I think that is the reason I am who I am today, just because I learned so much.” He related his childhood play to play at the children’s museum. “I think the reason I’m so fond of this place, too, is just because it kind of reminds me—it does have hints and stuff of what it used to be like when I was a kid.”

Full-time staff member: Jo. Jo is the museum’s operation manager and volunteer coordinator. I often saw her moving through the museum as though she were on an important mission. I scheduled a time to meet with her, and once we spoke there was little doubt that she was in fact, always working on something important. Jo’s mission was—and had been since being hired 30 days before its opening—the inner workings and day-to-day operating tasks of the children’s museum. Jo had grown up as the oldest of five sisters. Her father had been a contractor; therefore she had learned how to paint, dig sewer lines, build, landscape, and “a whole lot of other stuff.” Her mother had been a teacher. “You know Ms. Frizzle?” she asked, to which I responded with a resounding, “Yes!” My own background as an elementary teacher had made me quite familiar with the frizzy haired teacher heroine of the book series who took her class on scientific field trips in a magical flying school bus. “That’s my mother. I was raised by Ms. Frizzle!” she responded. It became clear to me that Jo’s anyone-can-do-anything philosophy had been instilled in her at a young age. “My parents taught me how to learn through play,” she said. “Like my dad had learned electronics when he was in the military, and so he taught all of us girls how to wire stuff. We know how to take apart our trucks and our cars, we know how to bake bread and jellies. We got the whole big picture!” Her parents had also taught her to respect the

abilities and differences of all people. “Age, ability—doesn’t matter. Your timeline might be different. Some people might learn faster, some people might be more athletically inclined. Some people might have opportunities or challenges that they’re living with—but we all learn, and we all do stuff. And that’s how we were raised.” Jo’s former experiences working with nonprofits and serving as an ombudsman for the military, as well as her work with building resiliency in military families had given her a unique skill set to serve staff, volunteers, and families at the children’s museum. As I spoke to Jo, it was clear that she not only had a passion for maintaining a richly playful and educational environment for the families who attend, but for her staff as well. She spoke of fostering autonomy in the staff at the children’s museum. “They have to be self-initiating. They have to come with their skills and use them.” She viewed her staff’s time at the children’s museum as preparation for life. Her goals for her staff and volunteers included being “calm, competent, and knowledgeable” and her respect for their individual strengths and unique challenges was palpable. She spoke of a young volunteer who had built a relationship with a family from China. The relationship grew into regular meetings where she helped them learn English, and utilizing newly learned skills from a university class in child development she had been able to assist with some unique circumstances regarding their child with special needs. Jo also reflected on the memory of another engineering student volunteer who had used his talents to help build exhibits. “It’s a big learning lab for our staff. We’re a nonprofit. We can’t pay very much. We don’t offer full-time jobs—we just can’t. However, if the staff can leave here with a bullet list on their resume that says, “I designed, I developed, I implemented, I put into place, I guided, I directed, I trained, I mentored, as opposed to I swept, I picked up, I color coordinated—then we’ve done our job.”

When I asked Jo about her role in children’s play, she laughed and said, “Instigator? Encourager? Partner? Support team? My most important role is making sure there’s a safe environment. The second most important role is making sure that it’s staffed with people that get

it [museum philosophy] and have fun—or want to learn to get it, because that’s just as much part of the picture.”

Jo had strong beliefs about play and its role in learning. She described play as, “discovering the wonder of our universe, and why things do what they do—and then what happens if you poke it!” She reflected on the importance of making mistakes and having failure in learning. She recalled a time from her own childhood play where she learned to sail a sailboat by first learning how to recover it when the instructor tipped it over! She vividly remembered the frustration and the hard work, yet still considered it a playful experience. Play, to Jo, was having a “great big problem to solve”, and she respected others’ needs to learn from mistakes. This was evident the day of our interview in her exchange with two college students who were having difficulties with the laminator. She said laughingly, “When my staff blow something up—like the guys working on the laminator right now. They blow it up repeatedly. I’m like, ‘What number are you on? Edison said 10,000 before he got the light bulb. Are you at a light bulb? Keep going!’”

Jo’s respect of individual differences carried over into her interactions with families who visit the museum. She talked about meeting individual needs, in some cases even getting out different materials for certain children who are repeat visitors and need an adaptation. She told me a story about a young mother who was so tired that she fell asleep. Instead of waking her, the museum staff let her nap and played with her baby until she awoke on her own. “That was so precious, but she needed a nap, and there were enough of us!” She mentioned another mother who visited the museum on a regular basis and did her college homework while her child played. She also acknowledged the need for adults in the museum to have time with other adults. I suspected that I already knew the answer, but I asked her, “How much prodding of adults do you do when they’re really disengaged with the children they bring?” She emphatically responded:

None. This is a safe place. We want our parents and chaperones to actively engage, but you know what? Parents need to check out sometimes. We have alarms on the doors. We have staff that are trained to respond quickly. If a parent needs to disengage and take five minutes away from that toddler because they had had enough? What a wonderful place to come.

Each of the seven highlighted adults expressed unique motivations for being at the museum, as well as various perspectives of play and its role in learning. It is important to note that the ten participants whom I have not yet discussed also displayed distinct perspectives and agendas. And while it is important to consider that they, too, are noticeably different individuals with their own stories, I will now discuss the data in regard to commonalities and differences regarding adults' beliefs of the meaning of play, their beliefs regarding their roles in children's play, and how those beliefs are enacted in the museum. The remaining discussion includes snapshots of the entire group of participants.

Research Question Two: The Meaning of Play

When asked to describe play, most adults took a long pause before answering. Each time I asked the question, I waited in anticipation, thinking of the many different perspectives of the definition of play I had read in the literature. Many of the participants didn't answer in just one phrase or sentence, some even going into lengthy responses. Some described play by its induced emotional or bodily response. Linda answered as a player, "It brings joy to my heart." Alex, who was visiting the museum for the first time, considered his young son as he described play as "anything where I can see him smile or laugh." Similarly, Liam considered play a state of mind, "Playing to me is just having a smile on your face—not be worried and be positive, you know?" Liam mentioned the absence of reality in play as a positive trait. "If you bring a negative aspect into it, then you kind of bring reality into it, and a lot of reality is negative." Amena's *carpe diem* comment was similar. She believed to play was to "enjoy the time and place where you are at" and to be "in the moment." Several participants described play in the context as it occurred at the children's museum. Mallory, a part-time staff member, said "When all their [children] senses are engaged. When they're talking, listening, and just using their imagination. That's a big part of it—imagination." Trish, whose young daughter had spent at least 15 minutes at the art easel, thought play had to do with "being focused on something." Heather thought playing meant, "Playing with food, dress up, books—interacting with objects."

Others were emphatic that play was related to learning. Jamie, who was volunteering for the first time when I spoke with her, believed play was, “Learning—in a fun way. Hands-on, minds-on approach.” Similar to Manish and Laila who both believed play could be fun as well as meaningful, Julie believed that “while you’re having fun and playing, you’re learning how to do something, build something.” Julie, who was a regular museum-goer with her toddler, believed that the museum fostered different levels of play and children could enjoy the exhibits at different levels depending on their stage of development. “Once they, you know get older, or learn more or adapt more there, building different structures with the blocks instead of stacking them up. Making houses, making castles—along the way they learn and adapt. It’s fun for them at the beginning stages, but once they’re three or four they can actually build things.” Shelly first responded that play was when they were smiling and enjoying themselves, but also felt as if play were the foundation for learning. “I think children learn how things work better with hands-on experience. They learn how a ball rolls by pushing it. They are learning about momentum and physical development. They just learn how the world works by playing with toys, learning, and reading books.” Lisa, a part-time staff member at the museum for three years, felt that play was impacted by a child’s choice. “I think as long as they’re not being forced to do something, that they’re probably playing because they’re kids.”

Table 1 positions all responses regarding the meaning of play with corresponding ideas from the literature.

Table 1

Adults' Descriptions of Play (bolded statements by visiting adults)

Play is...	Descriptors of Play from the Literature
"I think as long as they're not being forced to do something... they're probably playing—because they're kids."	Voluntary, self-chosen, or self-directed (Brown & Vaughan, 2009; Eberle, 2014; Gray, 2013; Rubin, Fein, & Vandenburg, 1983)
No responses	Focused by rules created in minds of players (DeVries & Zan, 1994; Eberle, 2014; Gray, 2013)
"Using your imagination and exploring." "When they're talking, listening, and just kind of using their imagination." "When that little mind is going and the imagination is on."	Imaginary, non-literal (Brown & Vaughan, 2009; Gray, 2013; Vygotsky, 1978)
"Creating, and then once you create—well then, enjoying it." "Open-ended." "Free reign." "Being creative."	Process more important than product, means over ends Brown & Vaughan, 2009; Dewey, 1913; Eberle, 2014; Gray, 2013)
"When they're focused on something." "When she's excited about doing something." "Being in the moment...like carpe diem." "Enjoy the time and place where you are at." "When you're not worried about anything." "Time goes a lot faster when you're playing." "Time away from reality." "A state of mind." "When all their senses are engaged."	Alert mental state of flow, freedom from time, an enjoyable experience that energizes and completely absorbs the mind so as to lose all sense of time and space (Brown & Vaughan, 2009; Csikszentmihalyi, 1990; Gray, 2013; Rushton, Juola-Rushton, & Larkin, 2010)
"Anything where I can see him enjoy and laugh." "They're playing when they're smiling and enjoying themselves." "It brings joy to my heart." "They're having a good time." "Having fun—meaningful fun." "Having a smile on your face."	Fun (Brown & Vaughan, 2009; Eberle, 2010; Rubin, Fein, & Vandenburg, 1983)
"And I feel like play is the building block of learning." "Kind of has to do with their learning through play. They're doing some kind of activity." "I think fun play can be educational, too, as long as it's interactive." "Learning—in a fun way. Hands on-minds on approach." "I guess interacting with objects?" "So maybe there's a purpose for the play—kind of." "Discovering the wonder of our universe. And why things do what they do. And what happens if you poke it."	Play facilitates learning or is a means of assimilating new learning (Dewey, 1913; Frost, 2012; Piaget, 1962; Vygotsky, 1978)

Participants' perceptions of the meaning of play were also evident during other parts of our conversation, such as when I asked each of them to reflect on their own experiences of play, or their thoughts about the mission of the children's museum to inspire learning through play for a lifetime. During these conversations, some adults related the meaning of play to future careers. Steve, whose job was in information technology, first described play as "Using your imagination, and exploring, that kind of stuff. Creating, and once you create, well then, enjoying it." He remembered learning how things work when he was a child. "Mom and Dad would give me old clocks and whatnot, and I'd take them apart. That was part of our play, figuring out how to fix it and put it back together..." He mentioned its relationship to the "building" and "how things work" aspects of informational technology. "Why does it work the way it does?" When we discussed the museum's mission of inspiring learning through play for a lifetime, Steve said, "Well, I think the saying goes that if you love what you do, then you'll never work a day if your life, and that's really what this [museum] does. 'What am I having fun doing, and can I make a profession out of it?' He pointed out the potential of some of the museum exhibits. "They have things like the playhouse, or the theater...there's just a lot of stuff here that they [children] can say, 'Do I like to do this or not?'" Shelly, whose children were playing doctor and patient in the medical center, also related the exhibits at the museum with inspiring learning about life and future careers. "I think it's very good that they provide scientific discovery toys for the kids to learn how, like the cow, how to learn to milk a cow, and they learn about health through the health section. And the dramatic play with the babies is very positive. So they're learning about life roles, as well as possible careers. They may not see it as a career at this point, but they are learning steps of it." Linda reflected about her chores as a child, which felt like play to her. She lamented that her grandchildren did not have similar experiences. "That's missing from them—I try to make up for it in other ways."

Protocol writing. Participants' protocol writing further provided insight into their views of the meaning of play. Linda, who had described play as "bringing joy to my heart", expounded on her memories of her chores on the farm. She shared memories of a favorite pet pig who loved to have her back and belly scratched, calling her a "gentle giant." She expressed her joy of the memory of the sow birthing new baby pigs, and remembered their fencing as not being adequate to contain all the babies. While her father had not been pleased, Linda remembered being happy that "babies were running everywhere." She and her two brothers took pleasure in keeping the baby pigs contained. She described this as a "happy" time, until a change in the sow's demeanor toward the babies required separation and bottle feeding. She described the care of the infants as "traumatic" for her, as they used wire cutters to cut the teeth of the infant pigs in order to encourage nursing. Linda couldn't understand how a mother could be mean to her babies, describing it as "heartbreaking." Her joyful story of playful chores ended with selling the baby pigs, butchering a sow, and never getting another pig.

Liam's writing of childhood play again reflected his love for his father. He recalled four-wheeling with his dad on what he called a "perfect" Christmas day with snow on the ground and cookies for Santa. He also remembered his dad as always being willing to play with him. Liam would "eagerly grab" his mitt from the back room, approach his dad, always receiving the response, "You ready to play?" He described their play on "beautiful sunny days", recalling the sound of the ball hitting his glove, and his dad's voice helping him grow as the "time of my life."

Paula, responsible for programming and outreach at the museum, connected her childhood play to her current passions for music, and credited her grandmother for instilling a love of music in her life. She fondly remembered lying in bed with her grandmother listening to her stories, rhymes, and songs. She believed her love of music had carried over into many aspects of her life, even getting her into trouble at times. She remembered a specific time from childhood when she was popping her belt on her way to school. "I remembered popping this belt in the back seat of the car repeatedly and how amazed I was at being able to make that noise." The joy turned

to sadness as soon as the carpool driver had taken her belt away. Paula reflected that her interests as a young child continued to surface in her adult life. “An adult now, I teach children that music comes from any type of object that can be turned into instruments.”

Research Question Three: Beliefs in Action

After transcribing each interview, I revisited my observational field notes to search for a relationship between participants’ beliefs regarding the meaning of play to their actions while at the museum. My main reason for doing this was my wonder, “Do our beliefs about the meaning of play affect our pedagogical interactions with children while at the museum?” It’s probably important to note that many of the visitors related their descriptions of play to what the children were doing in the museum at the time. It’s almost impossible to know for certain whether their behavior in the museum was truly a result of their beliefs or if their statements regarding the meaning of play were influenced by what was taking place at that moment. At best, this research question has a complicated answer. I found that my notes regarding participants’ statements about the meaning of play and their interactions with children while at the museum also included notes about the participants’ perspectives of their role in children’s play. I deduced that these perspectives also influence their behaviors while at the museum. Therefore, I will share the participants’ perspectives of their role in children’s play, before I discuss the observations of their actions.

Research Question Four: Adult Role in Play

When asked how they would describe their role in children’s play, adult visitors, staff members, and volunteers responded with a variety of terms and phrases which range all along the continuum of involvement in play. In the following section, I first discuss adult visitors’ views of their roles and their behaviors while in the museum.

Visitor roles and beliefs in action.

Table 2 illustrates the responses from adult visitors regarding their roles in children’s play at the museum.

Table 2

Visitors' Descriptions of Their Role in Play

How do visitors describe their role in play?	
Visitor	Stated Role
Alex	"I want to see if he's the type that does not share with others."
Shelly	"I'm a bit of a free-range parent. I let 'em experience things on their own and I help them if I feel they need help."
Kim	"I don't know. Sometimes they seem a little bit too old."
Linda	"I like to help educate them." "I try to be a kid, too."
Trish	"Direct her toward activities." "Keep her safe." "Help her learn."
Julie	"Let her explore." "See what she is struggling with." "See what keeps her attention." "Just let her guide me."
Heather	"I just try to encourage her."
Steve	"Help them explore new things." "Maybe push 'em a little bit to try something that they haven't tried yet." "Guide them if they're doing something wrong."
Amena	"I prefer to observe, but when it comes to the train station, I play with him."

After analyzing observational field notes and the entire interview transcript for each adult visitor, I considered each person's statements about his or her role, as well as what I had observed. Referring to the literature regarding adult roles in play, I made note of each role of which there was evidence present in the children's museum. Figure 6 illustrates the number of adults who performed each of these roles during their time at the children's museum. It is important to note that all but one adult displayed evidence of more than one role, and many of them displayed evidence of several roles while at the museum.

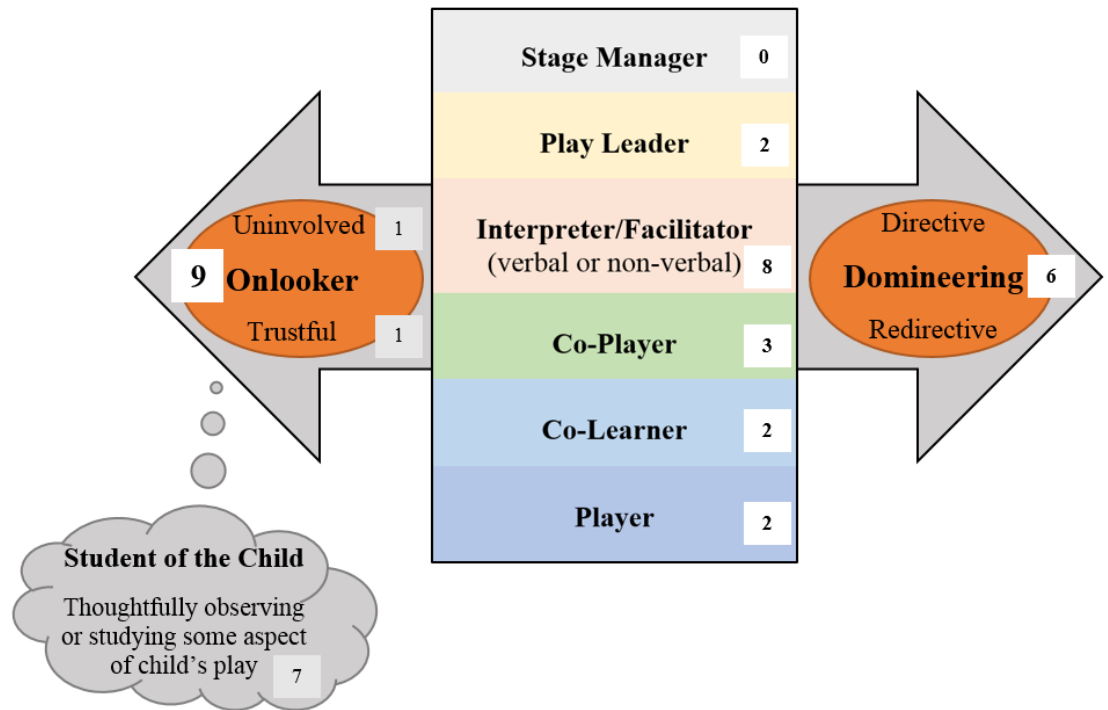


Figure 6. Visitor Play Roles Evident in Children's Museum.

Evidence of the fewest number of roles was presented by Kim, whose data indicated only one: *uninvolved onlooker*. Even though she did look up occasionally as children would speak to her in passing, I did not see her interacting with any of them in any way that evidenced engagement in or facilitation of play. She was clearly physically disengaged, and when I spoke to her she could not name a role for which she was responsible. In contrast, Steve presented with the highest number of roles in the museum, with seven. Steve, visiting with his wife and two young grandsons, was clearly a *facilitator* and *interpreter* of play. He exhibited many instances of verbal and non-verbal cues that were meant to advance the play or enhance the experience. At the climbing wall, he supported his grandson with his physical body, guided his hands and feet with actions and words, "Push off with your foot," and "Put your weight on this hand," and encouraged him with phrases such as, "Look; you did it!" He slipped into the director role when the child became afraid on the wall, saying, "Listen, I'm going to show you," and when he said to

both boys, “Come here! I’m going to show you how to milk a cow!” He was a play leader at the train exhibit, “I want to build a drawbridge, but I need the right materials. Can someone help me find them?” He also moved in and out of *co-learner*, *co-player*, and *player* as he built a construction at the train table, sometimes talking and working collaboratively with his family. The family was engaged with the train set for quite some time, and he even made the comment after our conversation, “I’m surprised that they stayed here!” He showed evidence of the *student of the child* role when he considered his grandson’s fears and efforts to overcome them while playing on the rock wall. Steve also reflected on his role in his grandson’s play. “Help them explore new things. Maybe push ‘em a little bit to try something that they haven’t tried yet, or guide them if they’re doing something wrong.” Steve stated that he would describe play as “Using your imagination, and exploring—that kind of stuff. Creating, and then once you create—well then, enjoying it.” Steve’s actions in the museum matched his statements.

While all of the roles at the mid-point of the continuum are somewhat facilitative of play, the *interpreter* and *facilitator* roles are specifically noted in the literature as actions and language used to reinforce or cue the child (Beaumont, 2010). Beaumont (2010) identified these roles as typically the most prevalent in a children’s museum, and this study was no exception. Of the nine adult visitors, eight of them displayed evidence of being in the interpreter or facilitator role. Steve *interpreted* the science behind what was happening when his grandsons milked the pretend cow. Amena interpreted the correct spot to drop the coin in the money-go-round, then facilitated by lifting up her son to put the coin in himself. Heather showed her daughter where to place her foot in the climbing structure, “This one scares her,” she said. Trish stood next to her daughter at the painting easel, occasionally helping her spray the water that cleaned the shaving cream off to start again, until the little girl could do it on her own. Once the child was focused and no longer needed her assistance, Trish backed up and sat down on a bench close by. “I kind of let her be on her own a little bit. If she’s just standing there lost I might direct her.” Julie guided her daughter’s hands to make the motions during the song and dance time in the theater, and when Shelly’s son

in the medical center suggested that he “didn’t need crutches anymore and would take an x-ray, she encouraged him with, “Awesome! Take a picture of your bones!”

Although playful moments did occur, there were fewer instances of adult visitors actually involved as *players*, *play leaders*, *co-players*, or *co-learners*. Unexpectedly, the two grandparents—Steve and Linda—showed evidence of being in those roles more often than the other visitors.

I witnessed adult visitors display evidence of roles at either end of the continuum. Almost everyone demonstrated behaviors in the *domineering* category at times. Sometimes adults corrected children, “She has got to learn to share,” or, “No, you gotta leave your shirt on. That was the deal.” Similarly, almost every adult is some type of *onlooker* at some point during their visit. All nine visiting adults displaced evidence of *onlooking*: one *uninvolved*, one *trustful*, and seven as *student of the child*.

It is my view that *onlookers* have potential to be some of the most misunderstood people in the museum. Many assumptions can be made about adults who sit back and watch children without directly engaging in play, and it is only through conversations with these adults that we know the true motivation behind that choice. Through my conversations with the adult visitors, it became clear that many of them were considering some aspect of the child’s learning or development as they observed. Linda spoke of her youngest grandchild’s inquisitiveness as the driving factor behind his learning. She felt that his curiosity made her interactions with him more challenging. “He is very technical and he asks the questions that I sometimes have to look up,” she said, “so I really have to stay on top of him.” Heather, who was interacting with her daughter at the climbing structure, commented on the things at the museum that scared her daughter, but talked about the growth she had made in the year they had been making visits. Heather, who brought her daughter to story time every week, reflected on her progress in the climbing area in the toddler room, and how she had learned from the other children. “It took her a while to climb on the wall in there, but when she sees somebody do something—yeah, she starts!” She reflected

on her learning, “we’ve been here for about a year and she’s learned a lot.” Julie, a regular visitor, paid attention to the aspects of the museum that were special interests or presented challenges to her toddler daughter, and was thoughtful of ways she could extend these learning activities at home. “I see what keeps her attention and try to match toys that are following along with what she’s interested in here. Also, see what she might be struggling with so that we can work on those types of things at home.” Julie also spoke of her daughter’s frustrations and her need to learn to share. “We’re at that lovely age where fits are thrown.” Trish, observing her daughter in the art area, also talked about extending the museum experience to home. “She loves the water table. When it warms up we play outside in the water.” Amena was thoughtful about her son beyond his museum experiences. She spoke of the sometimes negative influence of the environment, and thought that giving her son “space” to do things on his own could allow him to keep his creativity, something she felt that she as an adult had lost.

Staff and volunteer roles and beliefs in action.

As Jo mentioned when I spoke with her, the children’s museum is a learning lab for all of the people who work and play there. It was evident during my conversations and observations with staff members and volunteers that they were continually learning and adjusting based on what was happening in the museum at the time, as well as the population of people who were visiting the museum. I observed most of them doing their operational duties as staff members in addition to interacting with children on the museum floor. Table 3 illustrates how adult staff members and volunteers at the children’s museum described their roles in children’s play.

Table 3

Volunteers' and Staff Members' Descriptions of Their Role in Play

How do volunteers and staff members describe their role in play?	
Volunteers	Stated Role
Jamie (volunteer)	"Mentor"
Manish (volunteer)	"Have fun" "Praise them" "Demonstrate"
Laila (volunteer)	"Question them" "Facilitator"
Liam (part-time staff)	"I like to play grocery." "I'll just sit up there...and they'll come play with me." "Or if they're alone, I'll go..."
Lisa (part-time staff)	"It depends on the child"
Mallory (part-time staff)	"It depends on the child" "Some kids are more shy and you have to respect that." "I usually play with my regular kids, if they want to, of course" "We're just here to facilitate play"
Paula (full-time staff)	"Being a positive role model"
Jo (full-time staff)	"Instigator" "Encourager" "Partner" "Support team"

Similar to the analysis of visitor data, I considered both observational field notes and interview transcripts for each staff member or volunteer. Using this information, I assigned each person roles from the literature regarding adult roles in play. Figure 7 illustrates all of the roles evident by staff members or volunteers within the children's museum. Again, each person displayed evidence of more than one role, and many of them displayed evidence of several roles while at the museum.

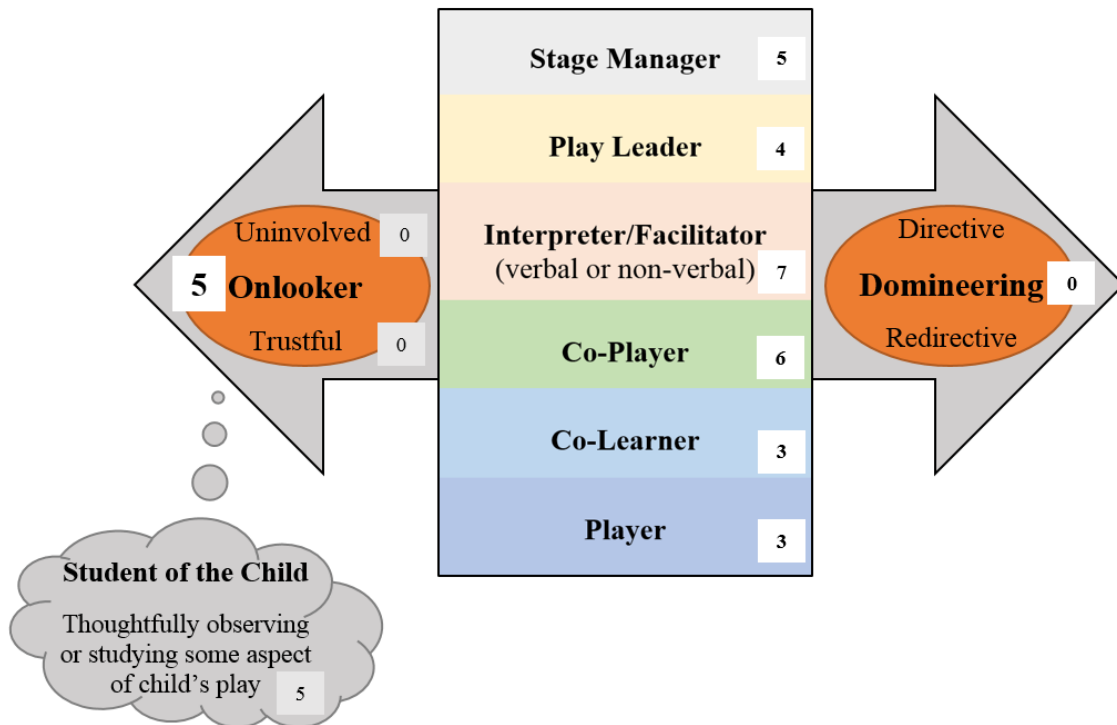


Figure 7. Staff and Volunteer Play Roles Evident in Children's Museum.

Similar to adult visitors, the *facilitator* role was prevalent among the staff members and volunteers. Mallory, Laila and Manish all talked to children and asked questions as they played. Liam made faces, threw balls, and invited children to play with him. While I never saw Jo interact with children, I saw her facilitative actions play out with staff members as she talked with them and asked questions about their day-to-day work and interactions in the museum. Her questioning of the volunteers who “blew up the laminator” facilitated their growth in problem solving and self-initiating behaviors. She had no intention of bailing them out by solving their problem for them.

Staff members and volunteers were also considerate of children's learning and development as they played. Mallory, Lisa, and Liam were all very thoughtful of children and their individual needs. When asked about their role in play, Mallory and Lisa both commented, “It depends on the child,” which illustrates their thoughtfulness regarding when to approach

children and invited them to play and when to leave them alone. Liam responded similarly when he remarked about paying attention to whether children looked bored or were playing alone. He only intervened when he felt that children needed support. Paula, when leading special events such as stories, singing, and dancing, was considerate of the various ages in her group and made adjustments accordingly. Her knowledge and expertise in early childhood made her thoughtful and flexible during tot-time with the moms and toddlers. While some of the mothers seemed uncomfortable when the toddlers didn't sit to listen to the story, Paula was very patient with the toddlers' attempts to touch the book. She encouraged them and modeled acceptance when they expressed their joy at the sounds the book made, holding the book out for them to touch the different textures and poke the noise-making buttons. She was also thoughtful to plan outreach activities that would meet various needs of participants.

Six staff members and volunteers displayed evidence of participating in the *co-player* role. These adults built alongside children in the block areas, role-played with children in the diner and medical center, and played checkers with children in the old-fashioned grocery store. These adults also displayed some evidence of the other roles in the mid-point of the continuum, *co-playing*, *co-learning*, and *play leading*, often moving fluidly between them during one play episode.

Unlike the visiting adults, a high number of staff members and volunteers displayed evidence of the *stage manager* role. This was not surprising, as the primary role of these adults is to assist in the preparatory acts of helping children be engaged in play: cleaning, preparing supplies in the art area, and repairing laminators. A surprising difference, however, was the lack of evidence of staff members and volunteers participating in any role on the *domineering* end of the continuum, either *directive* or *redirective*. While these adults are in charge of making the museum experience go smoothly for visiting adults, I did not see any evidence of actions that corrected, interrupted, or limited children's play in any way. When staff members did interact with children, they were either involved in the play scenario in a more playful way, or their

questioning of the children advanced the play in a way that seemed natural rather than limiting. Perhaps Jo's remarks regarding her work with staff members explains this best. While helping them learn strategies for dealing with children exhibiting negative behaviors, she coaches them, "The parent's job is discipline. Your job is distraction, 'Hey, have you seen this thing over here?'" She related it to her former experience as a lifeguard. "If you blow your whistle, 'Don't walk, don't do this, don't do this,' when you get home, you're a giant ball of DON'T. And you're miserable and you're unhappy, your teeth are tight and your eyebrows are tight. That's no fun for anybody and you hate your job and you hate people. I can't have that in here!" She teaches her staff that engaging children in play reduces the amount of time they are engaged in negative behavior and supports them in their efforts to enact this on the museum floor.

Similar to the adult's beliefs of the meaning of play and the beliefs of his or her role in that play, it is important to consider the adult's agenda for being at the museum and how it may affect his or her actions during the visit. All staff members and volunteers entered the museum each day with the agenda of facilitating the play of families who visit. Their stories of how they ended up working or volunteering at the museum are very much anchored in their desires to engage children and families in meaningful play. In contrast, the agendas of the museum visitors were varied. Some came to the museum to spend time with children, and the adults who expressed this were the most active in playful activities. The adults who expressed their motivation was to keep the kids from being "cooped up", or to "keep them from sitting in front of the T.V.", or because the admission "was cheap" were less likely to participate in activities that facilitated or enhanced play in any way beyond getting the children to the museum. However, one could argue that even an uninvolved visitor such as Kim facilitated her children's play by bringing them to the museum, rather than ignoring them at home.

Essential Themes

Phenomenological research brings a voice to those things that are often only felt, as a "reflective grasping of what it is that renders this or that particular experience its special

significance” (van Manen, 1997, p. 32). The phenomenological structures provided by van Manen (1997) of *Corporeality*, *Relationality*, *Spatiality*, and *Temporality* combined with the *Personal*, *Sociocultural*, and *Physical* contexts of Falk and Dierking (1992, 2000) joined to form a more holistic view of the adult experience. These theories also provided a frame as I searched for themes. While I did not limit my consideration of themes to topics that would fall into these categories, I considered each area of the framework as themes emerged. Through writing and rewriting while considering the data of adult experiences and its relationship to the research framework, the following three themes emerged: (1) Adults view the children’s museum as a space that fosters individuality, (2) Adults view the children’s museum as a space that fosters positive social interactions, and (3) Adults view the children’s museum as a safe space to play and learn. In the following section, I further explain and provide evidence of each theme, and explain its relationship to the research framework.

Theme One: Adults View the Children’s Museum as a Space that Fosters Individuality

Data revealed that adults who visit, work, and play in the children’s museum view it as a place that encourages the development of individuality of the children who visit, as well as a place that fosters the development of interests and strengths of adult caregivers and community members.

Individuality of children. Adults who bring children to the museum feel strongly that it is a place that encourages their children to pursue special interests. Visiting adults repeatedly made comments regarding the many options that were available to their children that were not available in their home settings. The many different stations and materials from which to choose appealed to visitors, and many were thoughtful about the effects of such an environment on their children’s learning, as well as how the environment fostered their own learning about their children. Linda spoke of “allowing the children to do it themselves.” She recognized that her grandchildren all had different interests when they came to the museum, and appreciated the opportunity for them to have some independence in each of these areas. Trish, while watching her

young daughter at the art easel, revealed that she had never seen her daughter so focused at one activity for such a lengthy time period. She compared her daughter's play at the museum to her own play as a child, and felt that the museum offered more choices than had been available to herself as a child. She felt the museum's options better enabled her daughter to identify her own interests, even at the young age of two years. The museum offered her opportunities to "figure out what her thing is." She also felt this influenced their activities outside of the museum. "I like to see what she's interested in because that kind of helps me as a mom direct her activities." Shelly mentioned the appeal of letting her kids make their own choices at the museum because of the many interesting opportunities for them to explore different possible career fields. Similarly, Steve reflected on his own childhood play's role in helping him develop his own interests in figuring out how things work, and imagined that his grandsons could do the same in the museum.

Volunteers had similar thoughts. Manish felt that play at the museum most likely built confidence in the children who came, while Jamie stated, "I feel like it [museum play] just piques their interest to maybe possible careers."

Individuality of caregivers and community members. Several adults mentioned the museum's role in fostering their own strengths and interests. Laila mentioned the museum's role in her own developing career aspirations. "Coming here reminds me of my initial goal [college] which was to work with kids." Paula, full-time staff member spoke of her own interests and the flexibility of her "dream job" with the museum to allow her to pursue her passions. Her role as outreach coordinator afforded her the opportunity to develop programs that built on her own strengths and interests, and allowed her to share those passions with children and families outside of the museum. She spoke of a grant she had recently written that would fund a future mobile exhibit. The exhibit would allow children to make musical instruments from found objects, an interest she had had since her own childhood play. Pursuing her interests had become an integral part of her success in her job at the children's museum. Similarly, Jo spoke of the opportunities that the museum had provide for staff members and volunteers to utilize special talents and skills:

the university students and professors who had worked with families and built exhibits, as well as the volunteers who disassembled and reassembled exhibits, changed light bulbs, and led art activities. She considered the museum a ripe “learning lab” for people of all ages.

Relationship to theory. When considering my research framework regarding the adult’s experience in the children’s museum, the development of individual sense of self is related to what Falk and Dierking (1992, 2000) would label the *Personal Context*. This theory considers the role of free choice and its relationship to motivation and informal learning, suggesting that the choice and control involved in the pursuance of personal interests in a space such as a children’s museum motivates learning to a greater degree than that of a more didactic environment such as many school classrooms. It also suggests that “learning is a rich, emotion-laden experience, encompassing much, if not most, of what we consider to be fundamentally human” (Falk & Dierking, 2000, p. 21). Experiences in a children’s museum can do much to foster a sense of self, described as an “awareness of personal needs, interests, and abilities” (Falk & Dierking, 2000, p. 21). According to Falk and Dierking (2000), “self is the mind’s gatekeeper” (p. 21). Having this sense of self is fundamental to all learning.

In a similar sense, one could relate van Manen’s (1997) idea of *Corporeality, or Lived Body* to the *Personal Context*. Lived body refers to the way an individual is present in the world. The body is the representation of the self in the world. It is through the body that interactions with museum exhibits and other humans occur. One could argue that the museum experience for the child and adult is both a very personal and bodily experience as each chooses, creates, and acts upon the environment.

The concepts of the *Personal Context* and *Lived Body* help to explore the deeply unique and personal experience of each adult in the museum. Each interpretation of reality is different based on one’s motivation for being at the museum, expectations of time spent there, prior knowledge, interests, beliefs, and the amount of choice and control one has while there. All of these come together in the museum and manifest as representation of the self.

Theme Two: Adults View the Children's Museum as a Space that Fosters Positive Social Interactions

Another theme that emerged from the data is related to adults' views of the social interactions that occur there. Data revealed that adults viewed children's museums as spaces where children could have positive interactions with adults and other children, but also as spaces that fostered the development of adult relationships with other adults.

Adults repeatedly revealed their thoughts regarding the benefits of their children having a place to play with others. Trish appreciated the opportunity for her daughter to interact with others, because she herself was an only child. Amena discussed the ease with which her son was able to play at the children's museum, which was a relief to her when she was tired from the work required of caring for a toddler. She found that the environment with other children stimulated his play, and made things easier for her on a hard day. Heather mentioned that she had noticed her daughter was less hesitant to do something that scared her after she watched another child perform the act. She had already mastered climbing a small wall in the toddler room, and was currently progressing to climbing in the larger structure in the playground area. Both Julie and Alex appreciated that playing with others at the museum would help their children learn to share.

Julie also mentioned her appreciation of the support system that adults could be at the museum. A regular museum visitor but a first-time attendee of tot-time, Julie explained that she and her friend brought their children for regular play dates at the museum. She enjoyed this time to catch up with her friend, as they both supported each other through the frustrating days of parenting. Heather also mentioned the support system of the regular group of mothers that came to tot-time every week. "We have some friends that meet together and they all play...we feel safe and love the teacher that does the stories." I had witnessed the small group of mothers whose children were of similar ages talking about issues related to their children's growth and development, such as sleep habits and pediatricians. They had obviously developed trusting relationships with one another through this shared experience.

Shelly, self-described free-range parent, had blocked out many of her childhood memories due to a childhood that “was not very positive.” It was important to her to provide her children with positive experiences and interactions with others. She mentioned her own enjoyment of interacting with other adults and children at the museum. She viewed the museum as a place where she could learn from others and others could learn from her. “I like to watch the children and I actually like to observe how other people interact with their children. And I interact with other people’s kids. But as an early head start teacher it’s comfortable to me to just step in and talk to other people’s children and encourage them. And I get a lot of smiles from the parents when they see how positive somebody else can interact with their children.”

Volunteers and staff members spoke of the importance of relationships at the museum. Mallory reflected on the three years she had first volunteered and then become a staff member. She said, “I have formed a lot of close relationships with kids and their families. I love getting to watch the kids grow up!” She spoke of how she always played with her “regular kids—just if they want to play, of course.” When I asked her if the museum had many repeat visitors, she responded with, “Yeah! I love my job! It’s my heart!” Liam, who had only worked at the museum for one month, commented about the family-like atmosphere among the staff. “Everyone who works here is so nice and they always have a smile on their face. And they’re always willing to help each other out. You know like the other night I was on clean team and I was alone. [The supervisor] stepped down and she helped me...and as a supervisor, you don’t have to do that.”

Both full-time staff members shared examples of positive social interactions. In Paula’s many trips to schools and libraries across the state, she had developed relationships with teachers, librarians, and students. She recalled instances where students remembered her from previous interactions and had greeted her positively when they saw her. Jo, who had been with the museum since the beginning, gave many examples of positive social interactions that had occurred over the years—students helping families, families helping students, volunteers helping children, community members serving the museum. She told me of an instance where a local group of

retired professionals, who volunteered on a regular basis to disassemble and provide maintenance on the airways exhibit, stopped their cleaning and engaged in a short stint of pretend play. She recalled seeing an older gentleman and lady with clear plastic tubes on their arms, walking like robots while saying, “Danger, Will Robinson!” She laughed while remembering. “I turned red and walked the other way ‘cause I was like, ‘Ooohhh, this is not happening in my museum!’ It was just so funny...arms in the slinky things chasing each other!” My favorite story from Jo was her account of a group of ladies from a local retirement village who had volunteered regularly to work with children. “They called themselves the Mother Goose Troupe and they would come in their van and they would have on their Sunday-go-to-meetin’ clothes—pearls, coiffed hair, and a PIG nose! They were doing the Three Little Pigs that day!” She laughed and went on. “And they knew how ridiculous they looked and they just giggled the whole time! And they sat in their chairs and they told the stories and the children are laughing, the parents are laughing, the grandmas are laughing—what a great multigenerational environment!”

Relationship to theory. Story after story appeared in the data that evidenced the adults’ views of the museum’s role in promoting positive social relationships. Falk and Dierking (2000) write of the *Sociocultural Context* and its role in the museum experience. This context helps to explain the facilitative actions that occur within groups of people as they share an experience—the looks, smiles, gestures, encouraging words and other ways of behaving—that support the learning that occurs in that space. It also sheds light on the idea of communities of learners—a concept that goes beyond the individual, or even each family who visits the museum.

Communities of learners share the same set of values, beliefs, and customs that is particular to that group. While each family who visits could be considered its own community of learners, other groups with members who share similar values and beliefs can have that designation as well—such as the university’s group of engineering students who teach science activities, the group of students who come from the university’s writing center, or the group of grandmothers from the retirement village.

Similarly, van Manen writes about *Relationality*, or *Lived Other*. Human beings search for fulfillment through connections with others. Beyond being present in the physical sense, individuals share interpersonal space with others (van Manen, 1997). Just as the pedagogic relationship between parent and child is unique and highly personal and ideally provides the child with a sense of guidance and support, I contend that the children's museum has its own pedagogy that fosters the communities of learners that gather there.

Theme Three: Adults View the Children's Museum as a Safe Space to Play and Learn

The data revealed that safety was important to adults who worked, played, or visited the children's museum. Many of them viewed the children's museum as a safe space in the community to play and learn. Three different aspects of safety were illuminated in the data: physical safety, intellectual safety, and emotional safety.

Physical safety. Most examples of physical safety are related to interactions between visitors and the children who were with them. Linda asked her grandchildren to stay together at the museum out of concern for their physical safety. She had known the school holiday and reduced admission price would bring in a large crowd. She had "made a deal" with her grandchildren that they would stay together, and she was visibly nervous when she couldn't quickly locate them through the crowd of people. "I told 'em we had to stay together—we couldn't split up." She spent enough time in the museum herself to trust the environment, but the large crowd of people made her nervous. Shelly, who was also in the museum on the same busy day, was supportive of her children playing on their own when they felt ready. She was much more willing than Linda to let the children gauge their own feelings of safety and act accordingly. Having been to the museum previously, her older children had raced off to their favorite area. Her younger two children were a bit more hesitant. "They stayed close to me at first...after they were comfortable being here for a little bit, they wandered off to do their own activities." Trish, giving her daughter some independence at the painting easel, backed away from her daughter but visually checked on her often. One of her roles in her play, she said, was to "keep her safe."

Heather also reflected fondly about her tot-time experiences. “We feel safe and love the teacher who does the stories. Amena spoke of the large space and ease in which her child was able to play, something they did not have at home. She reflected on her childhood and the hours she spent outdoors as an enjoyable time. She said, “It was very safe where we played so there were no worries.” She related this to her son’s feelings as he played in the museum. “As long as he feels safe, I trust.”

Some adults were thoughtful of the way the museum helped children conquer fears. Steve mentioned helping his grandson “overcome his fears” at the rock-climbing wall. Heather was very aware of what scared her daughter. She was sometimes afraid of climbing, so Heather was careful to support her. She was also afraid of the loud noise of air at the airways, but Heather stayed near her daughter as she watched from a safe distance.

Staff members also made comments regarding the physical safety of people in the museum. Mallory mentioned safety several times in our conversation, first by telling me that she had taken first-aid classes as preparation for working at the museum. She also spoke of the children’s museum as a safe environment where kids could be in charge, within limits. “This is a fun, safe place for kids to just be kids.” She felt that her role was to help both kids and adults feel safe. “We’re here to help the adults when they need it, and the kids—and make sure that everyone is having a fun time and are safe. And that’s what our rules imply. We don’t have very many, but they are to keep everyone safe.”

Intellectual safety. My conversation with Jo illuminated other aspects of safety that I hadn’t considered would be present in the data. Her respect for all people within the children’s museum community implied a sense of safety beyond the physical sense. Her belief in the importance of failure in learning was evidence of an intellectual safety that the data revealed was part of the culture of children’s museum. Mallory mentioned it during our conversation. “If something doesn’t work, try it a different way. I mean even working here, I’ve experienced it. We’ve all experienced that. My boss will be like, ‘Well, we play to learn. So try to do something;

if it doesn't work, then try it a different way.’” This belief also impacted Paula’s interactions with her intern. She reflected on a conversation in which they had recently engaged. “It's okay to play, it's okay to make a mistake, it's okay to start over again. I feel that's the best thing. You've got to be that role model. I've got a new assistant right now, and I'll look at her and I'll say, ‘I may tell you something, but most of the time I'm going to have you come on—let’s go look. Let's go put our hands on it and see.’”

Emotional safety. The data revealed a view of the importance of emotional safety in the museum as well. Jo spoke of a group of families who had been occasional visitors throughout the last few years. They often traveled the great distance from their home in the country together and combined their museum visit with other local errands. Some of the children from the families often presented special challenges for the staff, and she talked about the relationship the museum staff had built with the families. She felt the relationship made everyone’s museum experience better when the families visited. “And as they've grown, we're like, ‘Wait a minute! I know what you like!’ We'll go find other stuff and bring it out, so that the bigger kids can engage at their level now, because we've watched them. We know who they are, we know what they need. And it's a lot more fun to engage a kid than to have to distract them from destruction.” She mentioned the need for the adults in the families to have time to connect with each other. She often encouraged the staff to play with the children out of respect for that need.

Jo’s wish was that every adult visitor would engage in play with children in the museum, but she was accepting and non-judgmental of adults who didn’t. She told stories of exhausted mothers of infants, parents taking classes who had homework to complete, and the frustrated parent who might need to take a time-out from a toddler. She was emphatic that the environment be accepting for all individuals.

Relationship to theory. When people are asked to reflect on museum experiences, no matter how much time has passed since their visit, their responses are usually related to the memories of the physical space—what they saw, did, or felt in those experiences (Falk &

Dierking, 2000). Physical space matters to the museum visitor. The first time a person visits a museum, he or she explores the surroundings and gets oriented to the space before he or she engages further with the museum content. The regular visitor behaves differently in the space, knowing exactly where he or she wants to spend time, and after learning to navigate the space is finally able to focus more on exhibits (Falk & Dierking, 2000). In Falk and Dierking's (2000) discussion of the *Physical Context*, they contend that learning is very context specific, and a person's learning is directly related to his or her feelings in that space. This could explain why the importance of feeling a sense of safety came up so often in the children's museum data.

Similarly, van Manen's concept of *Spatiality*, or *Lived Space*, refers to how an individual feels space (van Manen, 1997). Lived space affects emotion (van Manen, 1997). Special memories of a time or event are often tied to the space where the occasion occurred, such as memories of home, or play as a child (Sandberg, 2003; van Manen, 1997). The feeling of being safe, or not safe, in a children's museum would most likely affect the interactions and learning that occur in that space. The physical, intellectual, and emotional safety of all individuals in a museum, adult or child, should be priority.

Missing Theme: Temporality

While aspects of temporality did surface in the evidence, nothing related to time or temporality emerged as an identifiable theme. This may be due to the organization of the study, as well as the fact that very few participants completed the writing protocol exercise. Except for a few observations of some staff members that occurred on more than one day, all observations of visitors and volunteers were snapshots of their time in the museum. Falk and Dierking (2000) contend that learning is constructed over time in layers—this concept would be difficult to capture with the current structure of the study. Amena did refer to how she had changed as a museum visitor over time, noting that she was currently much more apt to engage in play than she had been in her first visits. Liam's suggestion that play is an escape from reality alluded to time as a *felt* concept when reflecting on his childhood play. Similarly, Steve's wife mentioned that

she noticed he was able to escape the realities of life at the museum, where it could be “all about the kids.”

Conclusion

In this chapter, I presented the data related to each research question, then offered evidence of three themes that emerged in regard to adults’ experiences at the children’s museum, and their beliefs and actions while at the museum. In the following chapter, I discuss my conclusions, implications for theory, research, and practice, and recommendations for practice and future research.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

All grown-ups were once children...but only a few of them remember it.

— Antoine de Saint-Exupéry, *The Little Prince*

The importance of quality play experiences for children was the inspiration for this research. The negative effects of play deprivation are real—and concerning to those who advocate for children. We can learn much from pedagogical relationships between loving adults and the children in their care. Through existential reflection of lived experience, we can become more attuned to our own personal pedagogies, which lie at the heart of each unique person (van Manen, 2015). Consider Paula’s reflection of childhood play with her grandmother:

As a young child, I would lay in bed with my grandmother listening to the stories that she would tell me about when she was a child. I would also listen to her sing to me nursery rhymes and rhymes of her time. This all stuck with me, and the importance of music in a child’s life—the universal language. I remember what a role model my grandmother was to me and how I wanted to be just like her. I think I have done her proud.

Paula’s experience as program and outreach coordinator for the children’s museum continues to be shaped by pedagogical notions she experienced with her grandmother at a young age. Her passion for making music, her zest for life, and her gentle way with children, parents, and teachers all play a significant role—not only in her own experience at the children’s museum, but the experiences of others as well.

Time for children's play has steadily decreased in homes and schools over the last half-century. Spending large blocks of time creating make-believe scenarios, building forts, playing pick-up sports in the neighborhood, or roaming the countryside for hours are not options for many children. Demanding lifestyles, fewer perceived safe spaces, academic pressures, and the advancement of screen technologies limit the amount of time children spend in quality play experiences (Frost, 2010; Gray, 2011). The pressures of an increased focus on academic subjects such as math and reading have influenced schools to do away with recess, as well as reduced the amount of time students can engage in playful, inquiry-focused classroom activities (Ginsburg, 2007).

History has proven—as in the early child-saving movement of the progressive era of education—that the efforts of concerned child-advocates can make a difference in children's lives (Chudacoff, 2007; Frost, 2010). The focus on improving conditions for organized play and learning resulted in the first children's museums, which still today attract families and school groups interested in the playful opportunities and resources they provide. Many child advocates view children's museums as educative resources that preserve and respect childhood, while empowering children with the choice and control to direct their own playful learning experiences (ACM, 2005a). Some families turn to children's museums to fill the void that the deprivation of play leaves in children's lives; visiting museums increases the amount of time children spend in enriching play experiences as well as provides an opportunity for adults and children to spend fun, quality time together (Caswell & Warman, 2014).

Multiple research studies indicate that the presence of an adult who is actively involved in supporting the play experience increases the opportunity for quality play and higher levels of learning (Downey et al., 2010; Leong & Bodrova, 2012; Puchner et al., 2001; Shine & Acosta, 2000). Therefore, practitioners of children's museums promote participation of visitors of all ages, and consider the engagement of adults a crucial element in the children's experience. The highest level of importance is placed on play experiences which are child-directed, but actively

supported and facilitated by adults (Downey et al., 2010; Puchner et al., 2001; Riedinger, 2012; Shine & Acosta, 2000).

Related literature presents evidence that there is sometimes a discrepancy between the expectations of museum practitioners and the visiting adults' behavior while in the museum (Downey et al., 2010; Shine & Acosta, 2000; Wood & Wolf, 2010). Despite the evidence that adult participation in child-led play enriches the learning through play experiences in children's museums, many adult visitors exhibit hands-off behaviors or are overly directive or disciplinary (Downey et al., 2010; Shine & Acosta, 2000).

This research has illuminated the importance of considering the background experiences, beliefs, and motivations—which make up the agenda—of the adults who work and play in a children's museum. Adults who worked or volunteered in the children's museum under study were found to hold similar beliefs and agendas of facilitating children's play, while visiting adults had a wider variety of motivations for being at the museum and agendas for their experience. Additionally, similar to Wood and Wolf (2010), adults who sometimes appeared to be disengaged with their children were actually making purposeful and thoughtful decisions regarding their children's play.

In a children's museum setting, visiting adults, museum staff, and volunteers make decisions about whether or not to insert themselves in children's play. Prior experiences in museums, views of the meaning of play, and agenda for the museum experience will likely influence decisions about whether or not to engage with children in museum activities. Exploring the *whatness* of the adult play experience—both visiting adults and those who design exhibits, programs, or interact with children—has provided insight into the behaviors of adults who visit or work in informal learning spaces. This new insight may result in better support for all adults in informal learning institutions who are involved in this modern-day child-saving effort, which in turn may result in more adults who practice pedagogically sound ways of interacting with the children in their lives.

Conclusions

The purpose of this study was to explore and describe the adult experience at the children's museum—those who work, play, or bring children to the museum. In the previous chapter, I presented each research question and its related data. Three themes emerged that were essential findings related to the adults' experience in the children's museum. These themes were: (1) Adults view the children's museum as a space that fosters individuality, (2) Adults view the children's museum as a space that fosters positive social interactions, and (3) Adults view the children's museum as a safe space to play and learn. In consideration of each research question and theme, I make two conclusions about the adult experience of play at the children's museum: (1) Agenda affects experience, and (2) A children's museum embodies its own pedagogy.

Conclusion One: Agenda Affects Experience

Each adult enters the museum with his or her own specific play history and agenda for being at the museum, as well as an individual view of the meaning of play and his or her role in that play experience. All of these aspects make up the unique visitor experience in a children's museum. Falk and Dierking (2000) contend that an individual's motivations, interests, and prior experiences with museums combine to create his or her expectations of the visit—the agenda. Remember Kim, Amena, and Steve? I offer their scenarios as examples.

Kim. Kim attended the museum on a very busy school holiday. She had previously been to the museum, but did not describe herself as a regular visitor. Her purpose for bringing her children to the museum was to get them away from the television on their day off from school. The meaning of play to Kim was “having a good time.” She remembered her own parents as not being directly involved in her childhood play outdoors on the swings, slide, and making mud-pies, although they supervised by checking on the kids often. When I asked her about her role in play she didn't name one, briefly mentioning that she felt her kids were a bit old for the museum exhibits. Observational data revealed Kim's role to be an uninvolved onlooker. She spent most of

her time sitting on a bench, looking at her phone while her kids played. She told me at the end of our interview that their museum visit had gone “really, really well.”

Amena. Amena and her toddler son had been regular visitors to the museum for the past two years. Her purpose for bringing him to the museum was to pass the time while her older child was in art class. Amena defined play as “being in the moment” and “enjoying the time and place where you are at.” Her memories of her own childhood play were of carefree days outdoors with her seven siblings in a very safe environment—so safe there were no adults. She was very honest in mentioning that caring for her son was tiring, and the museum was a place where he had many choices and much space to play—she felt it was a break for her. Safety was important to her, but she trusted the space of the museum. She described her role as being an observer of his play, except at certain areas in the museum where she played with him. My observations of Amena revealed her to be very facilitative of her son’s play, sometimes even encouraging him in ways that extended his play. She was verbally and physically responsive, interactive, and reassuring. She was also thoughtful about his development and needs. In the data her assigned roles were facilitator, play leader, and an onlooker—student of the child.

Steve. Steve came to the museum after work to meet his wife and two grandsons. His agenda was simply to have fun, and spend time with his grandsons. He viewed play as “using your imagination and exploring” as well as “creating.” He described his role in his grandsons’ play as “helping them explore new things” and “maybe push ‘em a little bit to try something they haven’t tried yet.” His own memories of play involved learning how things work by taking them apart and putting them back together. Observational data revealed Steve to exhibit seven of the roles on the play continuum of adult roles, most of which were facilitative and playful.

Differences in agendas. The agendas of adult visitors are obviously varied, and data revealed that adult visitors act in accordance to prior experiences, motivations, and beliefs. Adults whose agenda was to have fun spending time with children were generally observed doing just that, exhibiting roles on the play continuum that were playful and facilitative of children’s

experiences. Those adults whose agenda was to get the kids out of the house and away from the television may or may not have prioritized participating in play themselves. Most adult visitors exhibited roles at either end of the continuum of play roles in one visit; it was not unusual to see visiting adults being both onlookers and directive at some point during their children's play.

In contrast, the museum volunteers and staff members all had similar agendas, which was to facilitate play among the families who visited the museum. Their self-described roles were words such as mentor, positive role model, instigator, facilitator, and player. Observational data matched the terms these adults assigned for themselves. On the continuum of play roles, volunteers and staff members also exhibited various roles, but most of their actions were facilitative of children's play. In contrast to the visiting adults, I never observed volunteers or staff members to be overly directive or domineering in their actions with children or colleagues. Through my observations and conversations with each of them I found them to be very thoughtful and respectful of individual children's needs, as well as the needs of each visiting adult.

It is my conclusion that the discrepancy noted in the literature regarding the expectations of museum practitioners and the actions of visiting adults is most likely related to the difference in agendas among all involved. Those who work and volunteer at children's museums may be motivated by desires to facilitate quality play for children. Their backgrounds and experiences may have led them to pursue roles that they perceive are positive forces in the lives of children and their families. Adults who bring children to the museum may not share those agendas. They attend with a different, varied set of background experiences, motivations, and beliefs about play. Many visiting adults appreciate the safe environment of the children's museum for the opportunities it provides for their children to pursue individual interests with materials that are not always accessible at home, as well as interact with the other families who are present. Additionally, the adult visitor who appears to be uninvolved may actually be very mentally engaged, which was demonstrated repeatedly in the data. When observational data revealed adults

who were standing back as children played, conversations with those adults revealed purpose and thoughtfulness behind their decisions.

Conclusion Two: A Children's Museum Embodies Its Own Pedagogy

Max van Manen (1997) defines pedagogy as the “activity of teaching, parenting, educating, or generally living with children, that requires constant practical acting in concrete situations and relations” (p. 2). This notion of pedagogy refers to the relationship between the caregiver and the child; as adults, acting pedagogically results in thoughtful questioning of our interactions with children.

Pedagogy involves us in distinguishing actively and/or reflectively what is good or right and what is life enhancing, just, and supportive from what is not good, wrong, unjust, or damaging in the ways we act, live, and deal with children. (van Manen, 2015, pp. 19-20)

It is my conclusion that the children's museum as an entity embodies a philosophy of pedagogical thoughtfulness—not only between adults and children, but between the museum itself and the community of people it serves, and who serve it. In my many hours of observations and conversations with the people who worked, played, and visited the children's museum I was struck by the many pedagogically thoughtful interactions that occurred. Adults played games and made art projects with children, facilitated writing and hands-on science activities, danced, sang, told stories, and laughed. Adults also had thoughtful interactions with other adults, sometimes in sustained relationships. Moms of toddlers met weekly to “catch up” as their children played, parents of children with special needs gathered and offered each other support and advice, families new to the English language learned and practiced together. Adults gave to the museum community, and the museum community gave back.

The children's museum exists as a non-judgmental, safe haven for those who need refuge from the harsh realities of life. It is a place where college students can volunteer their special talents while exploring career possibilities, where children in the foster system can have free playdates with a struggling parent, where an exhausted, young mother can have an unintended

and much-needed nap, and where people of all ages can make connections with one another while serving the very community in which they live. From tiny toddlers learning songs and rhymes, to the Mother Goose Troupe from the retirement village teaching people how to knit or crochet, the children's museum is more than a just a place for children to play; it is a community safe space where people of all ages, backgrounds, and life experiences can play and learn with one another.

The social capital that results when people in the community form such a network of resources for the common good resembles the child-saving movement of the Progressive era, but there is an overwhelming sense that the events that occur at the children's museum are about more than saving children, but also about saving the community. John Dewey—philosopher, pragmatist, educator, and prominent leader of the Progressive movement—viewed museums as institutions where progressive ideas could be practiced. He considered museums not only as educative resources for children and adults, but spaces that would facilitate experiences which cause reflection, then action—encompassing a more humanitarian, socio-political goal (Hein, 2012). Dewey's ideas of the museum's role in education was attuned with his views of a democratic society, which Hein (2012) argues are still relevant for both museum studies and today's schools—the two broad concepts being:

- (1) visitors/students must be actively engaged (have experiences) in order to learn, and
- (2) the educational activity must be associated with experiences that enhance a capacity in the learner for living in harmony with an ever wider and broader community. (p. 19)

A community cares for all its members (Hein, 2012), and the community of learners that results from the exhibits, programming, and outreach of the children's museum embodies the progressive and democratic ideals of Dewey's time. According to Hein (2012), Dewey's notion of a democratic society was one in which community members “work together for social good” and also prepare to advance toward a “better, more just community” (p. 36). The application of progressive ideas in a children's museum as a response to issues of inequalities and social injustice among certain groups in our society seems as relevant today as it did in Dewey's time

(2009). The notion of a children's museum as an entity with its own pedagogy that exemplifies democratic ideals and thoughtful ways of being are illustrated in the following reflection from Jo, as she described the day that a widely diverse group of volunteers came to disassemble and perform maintenance at the airways exhibit. She remembered an adult with developmental disabilities who assisted two older gentlemen:

He was teaching these two guys how to do the work and maintenance on my airways. But the cool thing—you could totally see three fourteen-year-old boys—you could see it! You could see the joy, you could see the sharing, you could see the camaraderie, you could see the, 'Well what?' and 'I'm not sure!' Wow!! Cleaning and working on a thing—three gentlemen—it was amazing. So yeah, multigenerational—all ages—everybody learns.

Implications for Theory, Research, and Practice

This study has important implications for theory, research, and practice.

For Theory

The use of Falk and Dierking's museum experience frameworks (1992, 2000) with van Manen's lifeworld existentials (1997) provides a unique lens through which to view any informal learning situation in which pedagogical encounters might occur. Additionally, considering physical, intellectual, and emotional safety as each relates to pedagogy provides a new framework for viewing safety in the context of pedagogical relationships.

For Research

When making interpretations about actions of adults in children's museums, it is important to consider the motives behind choices that are made. This research contributes to the field of museum studies by adding the perspectives of the adults who work, volunteer, bring children, or play at the museum. It also introduces the idea of pedagogical thoughtfulness to include the space of a children's museum, which extends van Manen's (1997) work to settings where informal learning occurs. Considering pedagogy as not only a relationship that occurs

between adults and children, but also as a relationship that may occur between a museum and its patrons is a new way to position the role of a children's museum in the community.

For Practice

This research encourages anyone who has interactions with children—museum practitioners, educators, and caregivers—to be thoughtful in their pedagogy, which ultimately serves children in its effort.

For museum practitioners. According to van Manen (1997), pedagogical thoughtfulness may lead to political or personal action benefitting the community it serves. Children's museum practitioners set a tone for pedagogical tact—the ways in which adults interact thoughtfully with the children in their care. This research inspires practitioners to be critical, reflective, and active in regard to interactions with people who are staff members, volunteers, or players at the museum. It encourages museum staff and volunteers to be sensitive to the varying beliefs and agendas of visiting adults which may be different from their own.

Children's museums seek to reach all children and their families, regardless of ability, race, background, or social status. This research may encourage museum practitioners to consider not only those people in the community whom the museum reaches with its efforts, but also those who have yet to be reached—and strive to develop strategies for more wide-reaching inclusiveness.

For caregivers. All adults who work and play at the children's museum play a critical role in how the museum is experienced by the child. This research encourages thoughtful reflection of our interactions with children, within and beyond the museum walls. According to van Manen (1997), this reflection is necessary in order for adults to be sensitive to their ways with children:

We need to act in the lives we live, side by side with our children, but then also wonder, always wonder whether we did it right. We need to 'listen' to pedagogy so as to be able to act in a better way pedagogically tomorrow. (p. 149)

For educators. While this research focuses on the adult experience, it encourages a reflectiveness of the adult relationship with children. “The end of human science research for educators is a critical pedagogic competence: knowing how to act tactfully in pedagogic situations on the basis of a carefully edified thoughtfulness” (van Manen, 1997, p. 8). To be an educator is to make a commitment to thoughtful pedagogy. This research is a contribution to that effort.

For children. While this study explores the lifeworld of adult play, it is ultimately about children. Children depend on the adults in their lives to guide and nourish their whole selves. Children are the definitive benefactors of the pedagogic tactfulness of adults in their lives.

Recommendations for Practice

Practical applications of this research in children’s museum settings—or similar institutions where adults and children gather for informal learning—may result in more pedagogically sound exhibit design and ways of perceiving visiting adults within the museum. Wood and Wolf’s (2010) study of parents who stand back in museums recommends exhibit design that intuitively supports interactions that work best for each family’s personal choices. Museum practitioners may continue to have the goal that visiting adults and children will engage in playful interactions in the space. Staff members and volunteers may model participatory behaviors to demonstrate how adults might play in the area, which ultimately might encourage more familial interactions; however, staff members and volunteers may jeopardize the visiting adults’ perceptions of the safe environment of the museum by overtly suggesting they change their behavior. A culture of acceptance is nurtured when visiting adults do not feel judged for their perceived lack of engagement; an adult who feels accepted in an onlooking role may potentially feel fewer inhibitions in the space when participating as a player. Awareness of the many different choices adults make regarding participatory roles will help museum staff and volunteers make more informed choices when interacting with adults who visit the museum.

Additionally, museum practitioners who plan for more engaged adult visitors may want to consider ways in which they can inspire change in the adult agenda, either before or after the adult arrives at the museum.

Recommendations for Future Research

New learning frequently leads to the illumination of what is still unknown. The following are recommendations for future research:

- What is the temporal experience of an adult or child who visits a children's museum? A study designed to examine repeated visits to a children's museum over the course of a longer period of time would provide insight into the museum-visitor pedagogical relationship.
- What is the pedagogy of a children's museum? A more in-depth look at the pedagogy of the space of a children's museum could yield insightful information regarding the democratic educative practices that occur there. A look across the spectrum of children's museums to identify the distinctions among them could illuminate practices that help to set the pedagogical tone of each museum space.
- What is the relationship between a children's museum and the community? A study to look at the community engagement beyond the walls of the museum could reveal ways in which social capital is created and maintained.

Researcher Reflections

During my last conversation with Jo, I asked her what else she would like for me to know about her experience as operations manager of the children's museum.

Jo: I wish adults in our community could see what happens without having to engage. I wish they could come in and like, just watch what's going on, and think about what's happening. And then maybe volunteer. Maybe find a way to engage, maybe find a way to think, 'I know about...' or 'I could...' or 'I'd like to bring...' Maybe a teacher, 'I'd like to bring my kids to do this.' Maybe a grandparent, 'I'd like to bring...' Maybe an adult is, 'I could totally build a ...'

And I would like for this to be an environment where non-traditionally attached-to-children adults could go, 'Oh, I want to go play at the [children's museum].' And if that

play is fundraising, if that play is mentoring, if that play is showing us how to change electronics, if that play is...

K: If that play is teaching crocheting?

Jo: Yes! Working on IT stuff? If it's linking other people in our community with this as a resource? 'Oh, oh, I've been over there. My kids are grown, however your kids...'

K: An idea mill where adults could come and say, 'I have an idea.'

Jo: Yes, and they do! And it's so much fun because the people that built the boats are grandparents of a child that comes a lot. The gentleman that changes my light bulbs is a great-grandparent that has a scholarship level to give other kids memberships. Our people that help us with our internet and all our IT stuff is a local company owner—provides all of his families that work for him a membership. So, so, so many people are doing so many good things and that's one of the easiest ways to get yourself out of a dump or out of depression or out of a funk—serve others.

As Jo said, "so many people are doing so many good things." The children's museum is a wonderful resource for connecting people in the community—both children and adults—with learning through play experiences. My hope is that this research not only illuminates the experiences of the adults who work, volunteer, play, or visit the museum, but that it also tells the story of how a little children's museum has potential to bring a community together in unexpected ways.

REFERENCES

- Anderson, D., Lucas, K. B., Ginns, I. S., & Dierking, L. D. (2000). Development of knowledge about electricity and magnetism during a visit to a science museum and related post activities. *Science Education*, 84(5), 658-679.
- Anfara, V. A., & Mertz, N. T. (2015). Setting the stage. In V. A. Anfara & N. T. Mertz (Eds.), *Theoretical frameworks in qualitative research* (2nd ed., pp. 1-20). Los Angeles, CA: Sage.
- Association of Children's Museums. (n. d.). *Start a children's museum*. Retrieved from <http://www.childrensmuseums.org/images/InterActivity2015/EmergingMuseumsPre-Con/StartaChildrensMuseum.pdf>
- Association of Children's Museums. (2005a). *The case for children's museums*. Retrieved from www.childrensmuseums.org
- Association of Children's Museums. (2005b). Honorable mentions 2004. *Hand to Hand*, 19(1), p. 8.
- Association of Children's Museums. (2012). *Standards for professional practice in children's museums*. Retrieved from http://www.childrensmuseums.org/images/Library/Standards_for_Professional_Practice_in_Childrens_Museums.pdf
- Association of Children's Museums. (2017). ACM home. Retrieved from <https://www.childrensmuseums.org/>

- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barros R. M., Silver E. J., & Stein R. E. (2009). School recess and group classroom behavior. *Pediatrics*, 123(2), 431-436.
- Beaumont, L. (2010.). *Developing the adult child interaction inventory: A methodological study*. Retrieved from https://static1.squarespace.com/static/50f6e23ae4b08fc5612b49a0/t/522de39ae4b04c838fb0b127/1378739098107/Preschoolers_Parents_and_Educators-Developing_the_Adult_Child_Interaction_Inventory.pdf
- Beckstrom, E., Belmont-Skinner, L., Bond, L., Farrington, J., Medrano, M., Meisels, S. J., Pohlman, D., Roberts, J., & Stott, F. (2005). *Standards of excellence in early learning: A model for Chicago children's museum*. Chicago, IL: Chicago Children's Museum. Retrieved from <http://www.chicagochildrensmuseum.org/StandardsofExcellence.pdf>
- Bergen, D. (2009). Play as the learning medium for future scientists, mathematicians, and engineers. *American Journal of Play*, 28(73), 413-428.
- Berk, L. E., & Winsler, A. (1995). *Scaffolding children's learning: Vygotsky and early childhood education*. Washington DC: NAEYC.
- Black, L. A. (1990). Applying learning theory in the development of a museum learning environment. In ASTC (Ed.), *What research says about learning in science museums* (pp. 23-25). Washington, DC: Association of Science-Technology Centers.
- Bodrova, E., & Leong, D. J. (2001). *Tools of the mind: A case study of implementing the Vygotskian approach in American early childhood and primary classrooms*. Geneva, Switzerland: International Bureau of Education. Retrieved from <http://www.ibe.unesco.org/publications/innodata/inno07.pdf>
- Bodrova, E., Germeroth, C., & Leong, D. J. (2013). Play and self-regulation: Lessons from Vygotsky. *American Journal of Play*, 6(1), 111-123.

- Boston Children's Museum. (2018a). About Boston children's museum. Retrieved from <http://www.bostonchildrensmuseum.org/about>
- Boston Children's Museum. (2018b). Learning Together Museum Staff Training Curriculum. Retrieved from <http://www.bostonchildrensmuseum.org/exhibits-programs/museum-professionals/learning-together-museum-staff-training-curriculum>
- Bratton, S. C., Ray, D., Rhine, T., & Jones, L. (2005). The efficacy of play therapy with children: A meta-analytic review of treatment outcomes. *Professional Psychology: Research and Practice*, 36(4), 376-390.
- Brooklyn Children's Museum. (2018). History: The world's first children's museum. Retrieved from <https://www.brooklynkids.org/about/history/>
- Brown, S., & Vaughan, C. (2009). *Play: How it shapes the brain, opens the imagination, and invigorates the soul*. New York, NY: Penguin Group.
- Caplan, F., & Caplan, T. (1973). *The power of play*. New York: Anchor Press.
- Caswell, R., & Warman, T. (2014). *Play for today: a report into the importance and relevance of play for children and parents in the UK*. Retrieved from <http://outdoorplayandlearning.org.uk/wp-content/uploads/2016/07/play-for-today-1.pdf>
- Chandler, D. (2007). *Semiotics: The basics* (2nd ed.). New York, NY: Routledge.
- Chicago Children's Museum. (2018). About us. Retrieved from <http://www.chicagochildrensmuseum.org/index.php/about/mission-history>
- Children's Museum of Manhattan. (2017). Outreach. Retrieved from <https://cmom.org/outreach/>
- Chudacoff, H. P. (2007). *Children at play: An American history*. New York, NY: New York University Press.
- Clifford, J. (1997). Spatial practices: Fieldwork, travel, and the disciplining of anthropology. In A. Gupta & J. Ferguson (Eds.), *Anthropological locations: Boundaries and grounds of a field science* (pp. 185-222). Berkeley, CA: University of California Press.

- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York, NY: Harper & Row.
- Denizet-Lewis, B. (2017, October 11). Why are more American teenagers than ever suffering from severe anxiety? *New York Times*. Retrieved from <https://www.nytimes.com/2017/10/11/magazine/why-are-more-american-teenagers-than-ever-suffering-from-severe-anxiety.html>
- Denzin, N., & Lincoln, Y. (1994). Introduction: Entering the field of qualitative research. In N. Denzin and Y. Lincoln (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Detroit Children's Museum. (n. d.). Detroit Children's Museum. Retrieved from http://detroitk12.org/childrens_museum/
- DeVries, R. (1997). Piaget's social theory. *Educational Researcher*, 26(2), 4-17.
- DeVries, R., & Zan, B. S. (1994). *Moral classrooms, moral children*. New York, NY: Teachers College Press.
- Dewey, J. (1902). *The child and the curriculum*. Chicago, IL: The University of Chicago Press.
- Dewey, J. (1913). Play. In P. Monroe (Ed.), *A cyclopedia of education* (pp. 318-324). New York, NY: Macmillan.
- Dewey, J. (1916). *Democracy and Education: An introduction into the philosophy of education*. New York, NY: The Free Press.
- Downey, S., Krantz, A., & Skidmore, E. (2010). The parental role in children's museums. *Museums and Social Issues*, 5(1), 15-34.
- Eberle, S. G. (2014). The elements of play: Toward a philosophy and definition of play. *American Journal of Play*, 6(2), 214-233.
- Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods*. Newbury Park, CA: Sage.

- Falk, J. H., & Dierking, L. D. (1992). *The museum experience*. Washington, DC: Whalesback Books.
- Falk, J. H., & Dierking, L. D. (2000). *Learning from museums: Visitor experiences and the making of meaning*. Walnut Creek, CA: Alta Mira Press.
- Falk, J. H., & Dierking, L. D. (2010). The 95 percent solution. *American Scientist*, 98(6), 486-493.
- Farne, R. (2005). Pedagogy of play. *Topoi*, 24(2), 169-181.
- Fisher, K. R., Hirsh-Pasek, K., Golinkoff, R. M., & Gryfe, S. G. (2008). Conceptual split?: Parents' and experts' perceptions of play in the 21st century. *Journal of Applied Developmental Psychology*, 29(4), 305-316.
- Forman, G. E., & Kushner, D. S. (1983). *The child's construction of knowledge: Piaget for teaching children*. Washington, DC: NAEYC.
- Foutz, S., & Emmons, C. T. (2017). Application and adaptation of an institutional learning framework. *Journal of Museum Education*, 42(2), 179-189.
- Frost, J. L. (2010). *A history of children's play and play environments: Toward a contemporary child-saving movement*. New York, NY: Routledge.
- Frost, J. L. (2012). Lessons from disasters: Play, work, and the creative arts. *Childhood Education*, 82(1), 2-8. doi:10.1080/00094056.2005.10521332
- Frost, J. L., Wortham S. C., & Reifel S. (2012). *Play and child development*. (4th ed). Upper Saddle River, NJ: Pearson.
- Gaskins, S. (2008). Designing exhibitions to support families' cultural understandings. *Exhibitionist*, 27(1), 11-19.
- Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182-191
- Gray, P. (2011). The decline of play and the rise of psychopathology in children and adolescents. *American Journal of Play*, 3(4), 443-463.

- Gray, P. (2013). *Free to learn: why unleashing the instinct to play will make our children happier, more self-reliant, and better students for life*. New York, NY: Basic Books.
- Guba, E. G., & Lincoln, Y. S. (1998). Competing paradigms in qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 195-220). Thousand Oaks, CA: Sage.
- Hein, G. (2009). *An optimistic time*. Retrieved from <http://www.george-hein.com/downloads/anOptimisticTimeHein.pdf>
- Hein, G. E. (2012). *Progressive museum practice: John Dewey and democracy*. Walnut Creek, CA: Left Coast Press.
- International Play Association. (2014). *Declaration on the importance of play*. Retrieved from http://ipaworld.org/wp-content/uploads/2015/05/IPA_Declaration-FINAL.pdf
- International Play Association. (n. d.). *The child's right to play*. Retrieved from <http://ipaworld.org/childs-right-to-play/the-childs-right-to-play/>
- Johnson, J. E., Christi, J., & Wardle, F. (2005). *Play, development and early education*. Boston, MA: Pearson.
- Kamii, C., & Ewing, J. K. (1996). Basing teaching on Piaget's constructivism. *Childhood Education*, 72(5), 260-264.
- King, N. R. (1979). Play: The kindergartners' perspective. *The Elementary School Journal*, 80(2), 80-87.
- Leach, A. (2016). *The clowns bringing laughter to refugee camps: 'Happiness matters like food'*. Retrieved from <https://www.theguardian.com/global-development-professionals-network/2016/dec/29/clowns-flying-seagull-project-normal-children-refugees-greece>
- LeCompte, M., & Preissle, J. (2003). *Ethnography and qualitative design in educational research* (2nd ed.). San Diego, CA: Academic Press.
- Leong, D. J., & Bodrova, E. (2012). Assessing and scaffolding make-believe play. *Young Children*, 67(1), 28-34.

- Lincoln, Y. S. (2005). Constructivism as a theoretical and interpretive stance. In J. L. Paul (Ed.), *Introduction to the philosophies of research and criticism in education and the social sciences* (pp. 60-64). Upper Saddle River, NJ: Pearson.
- Lincoln, Y. S., & Guba, E. G. (2013). *The constructivist credo*. Walnut Creek, CA: Left Coast Press.
- Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, NC: Algonquin Books.
- Luke, J. J., Letourneau, S. M., Rivera, N. R., Brahms, L., & May, S. (2017). Play and children's museums: A path forward or a point of tension? *Curator: The Museum Journal*, 60(1), 37-46.
- Mayfield, M. I. (2005). Children's museums: Purposes, practices, and play? *Early Child Development and Care*, 175(2), 179-192.
- Miller, E., & Almon, J. (2009). *Crisis in the kindergarten: Why children need to play in school*. College Park, MD: Alliance for Childhood.
- Milteer, R. M., Ginsburg, K. R., Council on Communications and Media Committee on Psychosocial Aspects of Child and Family Health, & Mulligan, D.A. (2012). The importance of play in promoting healthy child development and maintaining strong parent-child bond: Focus on children in poverty. *Pediatrics*, 129(1), 204-213.
- Mintz, S. (2004). *Huck's raft: A history of American childhood*. Cambridge, MA: Belknap Press.
- Mooney, C. G. (2013). *Theories of childhood: An introduction to Dewey, Montessori, Erikson, Piaget, and Vygotsky* (2nd ed.). St. Paul, MN: Redleaf Press.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Murray, R., & Ramstetter, C. (2013). The crucial role of recess in school. *Pediatrics*, 131(1), 183-188.
- National Association for the Education of Young Children. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8: Position*

- statement*. Retrieved from <https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/PSDAP.pdf>
- Office of the United Nations High Commissioner for Human Rights. (1989). *Convention on the rights of the child* (General Assembly Resolution 44/25). Retrieved from <http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>
- Pellegrini, A. D. (2009a). Research and policy on children's play. *Child Development Perspectives*, 3(2), 131-136.
- Pellegrini, A. D. (2009b). *The role of play in human development*. New York, NY: Oxford University Press.
- Pellegrini, A. D., & Smith, P. K. (1998). The development of play during childhood: Forms and possible functions. *Child Psychology & Psychiatry Review*, 3(2), 51-57.
- Piaget, J., & Cook, M. T. (1952). *The origins of intelligence in children*. New York, NY: International University Press.
- Piaget, J. (1954). *The construction of reality in the child*. New York: Basic Books.
- Piaget, J. (1962). *Play, dreams, and imitation in childhood*. New York: W.W. Norton.
- Piscitelli, B., & Anderson, D. (2001). Young children's perspectives of museum settings and experiences. *Museum Management and Curatorship*, 19(3), 269-282. doi: 10.1080/09647770100401903
- Polkinghorne, D. (1983). *Methodology for the human sciences: Systems of inquiry*. Albany, NY: State University of New York Press.
- Port Discovery Children's Museum. (2016). Port Discovery Children's Museum annual report 2016. Retrieved from <https://issuu.com/portdiscoverychildrensmuseum/docs/portdiscoveryannualreport2016>
- Port Discovery Children's Museum. (2018a). Educational Partners. Retrieved from <https://www.portdiscovery.org/educate/educational-partners>

- Port Discovery Children's Museum. (2018b). Our mission & vision. Retrieved from <https://www.portdiscovery.org/about-us/our-mission-vision>
- Porter, T., & Cohen, T. (2012). *Learning together: Families in museums staff training curriculum*. Retrieved from <http://www.bostonchildrensmuseum.org/sites/default/files/pdfs/Learning-Together.pdf>
- Puchner, L., Rapoport, R., & Gaskins, S. (2001). Learning in children's museums: Is it really happening? *Curator: The Museum Journal*, 44(3), 237-259. doi: 10.1111/j.2151-6952.2001.tb01164.x
- Ray, D. C., Armstrong, S. A., Balkin, R. S., & Jayne, K. M. (2015). Child-centered play therapy in the schools: review and meta-analysis. *Psychology in the Schools*, 52(2), 107-123.
- Riedinger, K. (2012). Family conversations in informal learning environments. *Childhood Education*, 88(2), 125-127.
- Rubin, K. H., Fein, G., & Vandenberg, B. (1983). Play. In E. M. Hetherington (Ed.), *Handbook of child psychology: Vol 4. Socialization, personality, and social development* (pp. 693-774). New York: Wiley.
- Rushton, S., Juola-Rushton, A., & Larkin, E. (2010). Neuroscience, play and early childhood education: Connections, implications and assessment. *Early Childhood Education Journal*, 37(5), 351-361.
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Los Angeles, CA: Sage.
- Sandberg, A. (2003). Play memories and place identity. *Early Child Development and Care*, 173(2-3), 207-221. doi: 10.1080/0300443030303091
- Shine, S., & Acosta, T. Y. (2000). Parent-child social play in a children's museum. *Family Relations*, 49(1), 45-52.
- Sutton-Smith, B. (1997). *The ambiguity of play*. Cambridge, MA; Harvard University Press.

- Swartz, M. I., & Crowley, K. (2004). Parent beliefs about teaching and learning in a children's museum. *Visitor Studies Today*, 7(2), 1-16.
- The Children's Museum of Indianapolis. (n. d. -a). Community partners. Retrieved from <https://thehistory.childrensmuseum.org/people/community-partners>
- The Children's Museum of Indianapolis. (n. d. -b). The history. Retrieved from <https://thehistory.childrensmuseum.org/timeline>
- Vagle, M. D. (2014). *Crafting phenomenological research*. New York, NY: Routledge.
- Van Hoorn, J., Nourot, P. M., Scales, B., & Alward, K. R. (2011). *Play at the center of the curriculum* (5th ed.). Upper Saddle River, NJ: Pearson.
- van Manen, M. (1997). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). New York, NY: Routledge.
- van Manen, M. (2015). *Pedagogical tact*. Left Coast Press: Walnut Creek, CA.
- Vygotsky, L. S. (1966). Play and its role in the mental development of the child. *Soviet Psychology*, 5(3), 6-18.
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Wallis, C., Booth, C. T., Crittle, S., Forster, P. (2003). Does kindergarten need cops? *Time*, 162(24), 52-53.
- Weinstein, D., & Weinstein, M. A. (1991). Georg Simmel: Sociological flaneur bricoleur. *Theory, culture, & society*, 8(3), 151-168.
- Wood, E., & Wolf, B. (2010). When parents stand back is family learning still possible? *Museums & Social Issues*, 5(1), 35-50. doi: 10.1179/msi.2010.5.1.35

APPENDIX A

Interview Questions for Visiting Adults

Interview questions were similar to the following:

1. What brought you to the children's museum today?
2. What is the child's age and your relationship to the child?
3. Are you a regular visitor to this children's museum or is this your first visit?
 - a. (First-time visitor): How did you prepare for your visit?
 - b. (Regular visitor): How do you prepare for your visits to the children's museum? How do these preparations change from visit to visit? Have you seen experiences that occur at the children's museum affect experiences outside of the children's museum? If so, can you give me an example or two?
4. How would you describe your role in your child's play here at the children's museum? How is this role different or the same than at home?
5. Do you play at the children's museum? If so, how?
6. How would you describe play?
7. Can you describe a vivid memory of childhood play?
8. Were there adults close by when you were playing as a child? What role did these adults have in your play?
9. What do you think you learned from the play you described?
10. One of the missions of the children's museum is to inspire curiosity to learn through play for a lifetime. Can you tell me what you think that means or give an example?
11. Can you describe similarities or differences between your play as a child and play here at the children's museum?
12. As an adult in the children's museum, what else can you tell me about your experience here?

APPENDIX B

Interview Questions for Staff Members and Volunteers

Interview questions were similar to the following:

1. Tell me about how you ended up working/volunteering at the children's museum?
2. How long have you worked/volunteered at the children's museum?
3. Tell me about any kind of training/education in which you participated to prepare you for this work. What about ongoing professional development related to this work?
4. How would you describe your role in children's play here at the museum?
5. Do you play at the children's museum? If so, how?
6. How would you describe play?
7. Can you describe a vivid memory of childhood play?
8. Were there adults close by when you were playing as a child? What role did these adults have in your play?
9. What do you think you learned from the play you described?
10. One of the missions of the children's museum is to inspire curiosity to learn through play for a lifetime. Can you tell me what you think that means or give an example?
11. Can you describe similarities or differences between your play as a child and play here at the children's museum?
12. As an adult in the children's museum, what else can you tell me about your experience here?

APPENDIX C

Writing Protocol

Dear participant:

Thank you for agreeing to participate in the research study *Adult Play in a Children's Museum*. Your participation in this study may benefit any informal learning institution such as a children's museum that desires to better understand the experiences of the adults who visit, work, or volunteer there.

On the following page, you will find instructions for completing the writing prompts. There is no required length for responses, and they may be handwritten or typed. I have provided the enclosed paper for your responses; however, using your own paper is perfectly acceptable.

Please return your writing either in person to the WONDERtorium (in this provided envelope) OR by email to kdickey@okstate.edu by Dec. 10, 2017. You may direct any inquiries to me at this email address, or by telephone at 405-612-3035.

Again, thank you so much for your time and willingness to help me with this project.

Sincerely,

Kristi Dickey

Doctoral Candidate, Curriculum Studies

APPENDIX C (CONTINUED)

Writing Protocol

Please respond to the following writing prompt (written in bold):

- 1. Recall a vivid memory of childhood play and describe the experience as you lived through it.**

Below are some suggestions that may help you as you are writing about your experience:

- a. Describe the experience from the inside: what were you thinking or feeling, what was your mood or state of mind?
- b. Focus on a particular example or incident: describe a specific event, an adventure, a happening, or a particular experience.
- c. Try to focus on an example of the experience, which stands out for its vividness.
- d. Attend to how your body felt, how things smelled, how they sounded, etc.
- e. Please don't worry about the quality of your writing (i.e. fancy terminology or flowery language). Just be real! You may write as much or little as feels appropriate.

Follow-up questions after completed writing protocol:

1. Why do you think this particular play experience stands out to you, or what does it mean to you?
2. Compare your memories about experiences of childhood play to your experiences of play at the children's museum. What is similar? What is different?
3. How did it feel to write about your childhood play?

APPENDIX D

Museum Approval

September 14, 2017

To Whom It May Concern:

The Oklahoma [REDACTED] is honored to grant permission for Oklahoma State University researcher, Kristi Dickey, to conduct research studies related to her dissertation, Adult Play in a Children's Museum, at the [REDACTED]

Research topics will include:

- How adults experience play at the museum
- The meaning of play to adults who visit and work in a children's museum
- How the meaning of play is reflected in adult behaviors at the museum
- How adults view their role in children's play

The research will take place from October 2017 through May 2018.

Please contact me at [REDACTED] if you need additional information or have questions.

Sincerely,

[REDACTED]

Executive Director

APPENDIX E

Institutional Review Board Approval

Oklahoma State University Institutional Review Board

Date: Thursday, December 7, 2017
IRB Application No ED17140
Proposal Title: Adult Play in a Children's Museum

Reviewed and Processed as: Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 12/6/2018

Principal Investigator(s):

Kristi Dickey	Kathryn Castle Aichele
	235 Willard
Stillwater, OK 74078	Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

☐ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.

2Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.

3Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and

4Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Scott Hall (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,



Hugh Crethar, Chair
Institutional Review Board

APPENDIX F

Recruitment Script

For visiting adults:

“Hello, my name is Kristi Dickey. You may have noticed a sign as you entered the museum telling you that research was being conducted in the museum today. I am interested in looking at the experiences of adults at the [REDACTED] I have been observing you in the last few minutes and I would like to talk with you about what you were doing, if you don’t mind. It will only take a few minutes. No participants will be named in the results of this study. May I ask you a few questions?”

For museum staff:

“Hello, my name is Kristi Dickey. You may be aware that I have been doing research in the museum. I am interested in learning about the experiences of adults at the [REDACTED] I have observed you performing your duties as a staff member and would like to talk to you about what you were doing, if you don’t mind. It will only take a few minutes. No participants will be named in the results of this study. May I ask you a few questions?”

APPENDIX G

Participant Information/Adult Consent Form

PARTICIPANT INFORMATION/ADULT CONSENT FORM OKLAHOMA STATE UNIVERSITY

Title: Adult Play in a Children's Museum

Investigator: Kristi Dickey, Oklahoma State University, Curriculum Studies, Ph.D. Candidate

Purpose: The purpose of the study is to explore and describe the adult's experience of play in a children's museum: interactions while in the museum, views of the meaning of play, and perceptions of her/his role in children's play.

What to Expect: In order for the Oklahoma [REDACTED] to continue to develop high quality experiences for families, you are invited to participate in this study. Participation will involve an audio-recorded interview up to 15 minutes in length, with the option for a voluntary follow-up interview and/or a brief writing exercise about a memory of play from your past. You may terminate your participation at any time. Participation in today's interview, protocol writing exercise, and follow-up interview should take no longer than one hour total.

Risks of Participation: There are no risks associated with this project which are expected to be greater than those ordinarily encountered in a day at a children's museum.

Benefits: Your participation in this research will help influence future museum exhibits, as well as contribute to the wider body of research regarding children's museum education.

Compensation: Participants will not be compensated for participation in this study.

Participant Rights: Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time.

Confidentiality: The records of this study will be kept private. Any written results will use pseudonyms and will not contain any identifiable information. Research records will be stored in a locked file or password protected computer and only the primary researcher and individuals responsible for research oversight will have access to the records. Data will be destroyed three years after the study has been completed. Audiotapes will be transcribed and destroyed within 30 days of the interview.

Contacts: Should you desire to discuss your participation in the study and/or request information about the results of the study you may contact the researcher or advisor at the following contact information: Kristi Dickey (researcher), 302 PIO Building, ITLE, Oklahoma State University, Stillwater, OK 74078, kdickey@okstate.edu, or Kathryn Castle Aichele (advisor), 304 Willard Hall, Oklahoma State University, Stillwater, OK 74078, kathryn.castle@okstate.edu. If you have questions about your rights as a research volunteer, you may contact the IRB Office at 223 Scott Hall, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

APPENDIX G (CONTINUED)

Consent Documentation:

I have been fully informed about the procedures listed here, and am willing to participate in the following (initial in each space):

_____ Follow-up interview by telephone or in person (at your discretion)

_____ Writing protocol exercise completed on your own time and returned in person to museum

OR via email to researcher.

I am aware of what I will be asked to do and of the benefits of my participation. I also understand the following statements:

I affirm that I am 18 years of age or older.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy of this form will be given to me. I hereby give permission for my participation in this study.

Name of Participant (please print)

Email

Telephone

Date of Birth

Signature of Participant

Date

I certify that I have personally explained this document before requesting that the participant sign it.

Signature of Researcher

Date

APPENDIX H

Notification of Research

Dear Museum Patrons:

There is a research study being conducted in the museum today by a graduate student in the Oklahoma State University College of Education, Health and Aviation. The [REDACTED] is committed to the ongoing improvement of exhibits and programs and to serving the needs of our families. The results of this study will help the museum continue to develop high quality experiences for you and your children. You may be observed and/or asked to participate in a voluntary 15 minute interview as you explore at these exhibits. If for any reason you are not comfortable with this, please feel free to let one of our staff know and the researcher will not include you in the study.

Thank you.

VITA

Kristi Lynn Dickey

Candidate for the Degree of

Doctor of Philosophy

Thesis: ADULT PLAY IN A CHILDREN'S MUSEUM

Major Field: Curriculum Studies

Education:

Completed the requirements for the Doctor of Philosophy in Curriculum Studies at Oklahoma State University, Stillwater, Oklahoma in May, 2018.

Completed the requirements for the Master of Science in your Curriculum and Instruction at Oklahoma State University, Stillwater, Oklahoma in 1995.

Completed the requirements for the Bachelor of Science in Elementary Education with Special Education Option at Oklahoma State University, Stillwater, Oklahoma in 1989.

Experience:

Oklahoma State University – Institute for Teaching and Learning Excellence, Teaching Support Specialist

Oklahoma State University – Adjunct instructor, Primary Mathematics Methods, Language Arts Methods

Mathematics Education Consultant, TERC
Cambridge, MA

Stillwater Public Schools – Teacher, grades K-2, Stillwater, Oklahoma

Professional Memberships:

National Association of Early Childhood Teacher Educators (NAECTE), Association for Constructivist Teaching (ACT), Association for Childhood Education International (ACEI), American Association of Teaching and Curriculum (AATC), Association of Children's Museums (ACM)